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## Teachers

## College

## 2011-2012

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## A Message from the President



As both an alumna of Teachers College and its president, I welcome you to the nation's oldest and largest graduate school of education, and also one if its perennially top-ranked - a place whose founding vision was to bring educational opportunities to all members of society, and whose faculty and students, time and again during more than a century of leadership, have demonstrated the power of ideas to change the world.

Our legacy is the work of a long list of thinkers and doers that includes James Russell and John Dewey; Lawrence Cremin and Maxine Greene; Edmund Gordon and Isabel Maitland Stewart; Mary Swartz Rose and Morton Deutsch; Arthur Wesley Dow and William Heard Kilpatrick.

These are people who created fields of inquiry. At Teachers College today, our work is about living up to their legacy by ensuring that we not only build knowledge, but enhance its impact by engaging directly with the policymakers and practitioners who will put it to use. Because of our preeminence, it is both our privilege and our obligation to focus our coursework and our research on the questions of the day in each of the fields we serve. To that end, we favor no ideology or single methodology, but instead seek answers that meet the genuine needs of teachers and other practitoners, and the children they ultimately serve.

Whether you plan to teach, conduct research, serve as an administrator, or pursue a career in health or psychology - or even if you are already active in one of these fields - at Teachers College, you are undertaking a journey that will change your life and the lives of others by unlocking the wonders of human potential.

As you explore this catalogue, I urge you to remember that the education you will receive at Teachers College is as much about the people you will meet - your professors and your fellow students - as it is about the knowledge you will find in books. So as you join with us in our work, open your hearts as well as your minds. Only then will you truly be able to say - as I proudly do - that you have learned everything you needed to know at Teachers College.


Susan Fuhrman,
President
Teachers College, Columbia University

## A Message from the Provost



Students and colleagues, my warmest welcome as you embark on your journey into the fields of education, psychology and health disciplines. I know that this will be an adventure that extends far beyond the classroom. You join a committed, energetic community of educators, deeply engaged in the work of connecting human lives with opportunities to learn. Thank you for choosing this path in your own life.

I hope you enjoy your studies at Teachers College. This is a place where you can delve into the possibilities of education and its allied fields, not only as a tradition or a profession but as a way of being in the world. We see education and life as vitally interconnected. This means that you - your roots as a person, your vision as an advocate of human development, your drive to change the world matter to us greatly as we develop our programs, degrees, and services.

So who are we as an academic community? We are many things, in fact, and must be, because we believe in freedom of inquiry, rigorous peer-reviewed research and teaching at the highest levels. But let me add that we stand especially for the value of inquiry-based teaching and learning. We strive to cultivate self-discovery and life-enhancing experiences for learners at all levels and ages. Working from within one of the world's greatest research universities, we make good use of the knowledge generated from science, social sciences, humanities and the arts to expand human capacity to learn and create. We also believe strongly in conducting our work in authentic partnership with the communities around us, because what we do at Teachers College is first and foremost about helping real people in the real world.

New York City is an exceptional place to study the fields we represent at Teachers College. Let me be blunt about this because it is so important. This place is not quite like any other, and you need to come here and work with us to realize the potential. Our working environment, in every dimension, reflects both the problems and opportunities of this civilization in their most intense and concentrated form. If you can engage the human prospect here, joining us as educators to imagine and create what might be possible to achieve with such magnificent human complexity, your work and ours will be of national and global significance.

Teachers College is diverse and we are proud of it. Along with the human diversity of our faculty and students, we are also a big-hearted place in our understanding of education and human development. Equity and opportunity are at the heart of everything we do. I use the term "education" as it has always been understood at TC, in its broadest sense, to include all the disciplines we embrace, from the preparation of classroom teachers, early childhood specialists, counselors and school psychologists, music and arts educators, to nursing educators, nutritionists, higher and adult education, and much more. Indeed, we are interested in all the fields of learning that bear on the well-being of students, families, schools and communities.

Above all, Teachers College is a place where these disciplines talk with one another. We are a community that welcomes difference, a place that fosters dialogue and respectful interplay among diverse and sometimes divergent points of view. You can find your intellectual home here and here is your launching pad for a productive career in education and related fields. Let's get to work!


Thomas James,
Provost
Teachers College, Columbia University

## Teachers College at a Glance

## A Ground-breaking Institution Built on Solid Principles

Teachers College was founded in 1887 by the philanthropist Grace Hoadley Dodge and philosopher Nicholas Murray Butler to provide a new kind of schooling for the teachers of disadvantaged children in New York City, one that combined a humanitarian concern to help others with a scientific approach to human development.

The founders recognized that professional teachers need reliable knowledge about the conditions under which children from varied backgrounds learn most effectively. As a result, the College's earliest programs, which included educational psychology and sociology, nutrition and nursing education, reflected the Deweyan view of education writ large, encompassing life in and out of the classroom.

They also insisted that education must be combined with clear ideas about ethics and the nature of a good society; consequently, programs were developed in the history of education and in comparative education. As the number of school children increased during the twentieth century, the problems of managing the schools became ever more complex. The College took on the challenge and instituted programs of study in areas of administration, economics, and politics. Other programs developed in such emerging fields as counseling, curriculum development, and school health care.
After World War II, in response to rapid development of new professional roles, the College added curriculum that reached beyond the traditional educational sphere, including programs in clinical and counseling psychology, speech and language pathology, audiology, post-secondary education, and international education. During the 1960s, driven by concern for equity in the schools, TC developed programs in fields such as urban education, ethnic education and the teaching of English to speakers of other languages.

In the past 25 years, the College has addressed the explosion of educational services outside the traditional school environment by designing programs for educators who will work in day-care centers, family assistance agencies, museums, libraries, businesses, telecommunications facilities, and other non-traditional locations.

More recently, Teachers College has been contending with the difficult problems of urban education, reaffirming its original mission-providing a new kind of education for those left most in need by society or circumstance. The College continues its collaborative research with urban and suburban school systems that strengthens teaching in such fundamental areas as reading, writing, science, mathematics and the arts; prepares leaders to develop and administer psychological and health care programs in schools, hospitals and community agencies; and advances technology for the classroom, developing new teaching software and keeping teachers abreast of new developments.

## Furthering the Cause of Education

Historically, Teachers College has played a vibrant and vital role in shaping and defining education in the New York area. Through the years, our influence has spread, as we have partnered locally, nationally and around the world with policymakers and practitioners in the fields we serve.

The Campaign for Educational Equity, founded in June 2005, sponsors, identifies and disseminates research showing how and why specific interventions can help narrow the gap in educational opportunities and outcomes that separate poor and disadvantaged students from their wealthier peers.

In 2006, Teachers College became home to the new National Center for Post-Secondary Education, the nation's largest federally funded research center focusing on higher education.

The Heritage School is a unique partnership between Teachers College and the New York City Department of Education. Now in its fifth year, the Heritage School accords full parity to the arts in its extended-day curriculum, requiring all students to supplement a rigorous academic base with trips to museums, galleries, theaters, libraries and concert halls.

Nationally, Teachers College hosts The National Academy for Excellent Teaching, which convenes prominent faculty, researchers, and outstanding teachers to develop new ways of upgrading the skills and knowledge of our nation's high school educators. The National Academy provides on-site and online support and coaching for educators in low-income high schools in New York City.

## Diversity-A Continuing Legacy

The strong emphasis Teachers College places on student diversity began in the early days of our history. Today, the diversity of our student population encompasses color, age and nationality, with students from all 50 states and a 15 percent international enrollment representing 80 countries. Of the approximately 5,000 students enrolled in Teachers College, about 75 percent are women, 9 percent are African-American, 11 percent are Asian American, and 6 percent are of Latin origin. Furthermore, with a median age of 35 years, our students bring maturity, a wealth of knowledge and strength of purpose to their pursuit of degrees and careers in education.

## TC Centers and Facilities Offer Wealth of Information

The College's continuously expanding centers and facilities-which house vast archival resources and facilitate exceptional student and faculty research-are among the nation's finest. These include:

The National Center for Children and Families advances the policy, education, and development of children and their families. Its efforts are built on a commitment to offer research-based approaches to contemporary social and public problems affecting underserved children and families.
The Institute for Urban and Minority Education conducts demonstration, development, evaluation and research projects to better understand the experiences of diverse urban and minority group populations in the different institutions and situations that influence their development.

The National Center for the Study of Privatization in Education provides independent, non-partisan research, evaluation, conferences, publications, and dissemination on a full range of issues regarding privatization of education from pre-school to higher education, both national and international.

For a complete listing of centers and institutes at Teachers College, please see the Academic Resources and Services section of this bulletin.

## New York City_TC's Proving Ground

Teachers College has built a dynamic alliance with New York City, enhanced by our new Office of School and Community Partnerships, which provides schools and other organizations with a single point of access to the College's resources. Researchers are involved in more than 200 schools throughout the five boroughs. TC students are developing and effectively implementing a number of innovative programs to help children at risk, including reading tutorial programs in under-funded schools and an after-school science program in an area homeless shelter.

Students also have the opportunity to take courses offered at Columbia University, as well as the Union Theological Seminary, Jewish Theological Seminary, and other New York institutions.

## Training Professionals in Three Related Disciplines

Together, TC's three highly complementary and interrelated areas of study-education, psychology, and health-work to fulfill our vision of Teachers College as a preeminent international human resource development institution, committed to systematic teaching and learning in all the major educative institutions.

## Academic Calendar 2011-2012

AUTUMN TERM 2011

| APRIL | 25 |
| :--- | ---: |
| 2011 |  |
| MAY | 16 |
| 2011 |  |

## SEPTEMBER 2011

(SEPTEMBER 7 - DECEMBER 22)
Monday. Opening day of Registration for the Autumn Term for continuing students via web. Registration is a continuous process through the end of add/drop on September 20. Students should contact their departments for program specific procedures and timelines.

Wednesday. Opening day of Registration for the Autumn Term for new students via web. Registration is a continuous process through the end of add/drop on September 20. Students should contact their departments for program specific procedures and timelines.

Thursday. Last day to submit, to the Registrar's Office, formal Master's essay for the October 19 award of degree.

2 Friday. Beginning of occupancy in Teachers College residence halls for new students attending the Autumn Term.

5 Monday. Labor Day. University Holiday.
6 Tuesday. New Student Experience Program (Orientation).
6 Tuesday. In-person Registration for Autumn Term. Hours: 10:00 a.m. to 7:00 p.m.; Advisors available from 2:00 p.m. to 7:00 p.m.
$7 \quad$ Wednesday. Classes begin. Autumn Term 2011.
7-8 Wednesday-Thursday. Registration and add/drop period. Hours: 9:30 a.m. to 6:00 p.m.; Wednesday and Thursday. Advisors available from 3:00 p.m. to 5:00 p.m.

15 Thursday. Last day to file notification in Office of Doctoral Studies of intention to defend Ed.D. and Ph.D. dissertation during the Autumn Term 2011.

20 Tuesday. Last day to add and drop courses for the Autumn 2011 Term, file a Certificate of Equivalency, and enroll in or waive the Health Service Program and the Columbia Student Medical Insurance.

21 Wednesday. Requests for late registration under exceptional circumstances on or after this date require Registrar's Approval and payment of $\$ 100$ late registration fee.

22 Thursday. Last day to file application for Doctoral Certification Examination (Ed.D./Ph.D.) to be given October 28 or November 4.

## OCTOBER <br> 2011

Tuesday. Last day to change points in variable point courses.
14 Friday. Last day to complete the final deposit of Ed.D. dissertation with the Office of Doctoral Studies for the October 19 award of degree.

14 Friday. Last day to complete the final deposit of Ph.D. dissertation with the Graduate School of Arts and Sciences for the October 19 award of degree.

19 Wednesday. Award of October degrees and certificates. No ceremony.
Wednesday. Midterm date, Autumn Term 2011.
Friday. Doctoral Certification Examination (Ed.D./Ph.D.) for students majoring in an area of psychology, 9:00 a.m. to 12 noon and 1:45 p.m. to 4:45 p.m.
Tuesday. Last day to file or to renew an application, in the Registrar's Office, for Master's degrees and certificates to be awarded in February. (After this date, application may be filed only until November 15 upon payment of $\$ 25$ late fee.)
4 Friday. Doctoral Certification Examination (Ed.D./Ph.D.) for students not majoring in an area of psychology, 9:00 a.m. to 12 noon and 1:45 p.m. to 4:45 p.m.
23 Wednesday. No classes. Offices open.
DECEMBER 1

2011
Thursday-Sunday. Thanksgiving Holidays.
Thursday. Last day to submit, to the Registrar's Office, formal Master's essays for the February award of degree.

Monday. Registration for the Spring Term for continuing students via web registration begins.
Thursday. Last Day of Classes. Autumn Term 2011 ends.
23 Friday. Termination of occupancy in Teachers College residence halls for Autumn Term students not returning for Spring Term 2012.

## Academic Calendar 2012

## SPRING TERM 2012

## JANUARY <br> 2012

## FEBRUARY <br> 1

## 2012

$\underset{2012}{\text { MARCH }} \quad 1$

## APRIL <br> 23 <br> 2012

## MAY

82012

## (JANUARY 18 - MAY 8)

Sunday. Beginning of occupancy in the Teachers College residence halls for the Spring Term.
Monday. Martin Luther King, Jr. Day Observed. University Holiday.
Tuesday. New Student Experience Program (Orientation).
Tuesday. In-person Registration for Spring Term 2012. Hours: 10:00 a.m. to 7:00 p.m.; Advisors available from 2:00 p.m. to 7:00 p.m.
Wednesday. Classes begin. Spring Term 2012.
Wednesday-Thursday. Late registration and add/drop period. Hours: 9:30 a.m. to 6:00 p.m.; Advisors available from 3:00 p.m. to 5:00 p.m.

Thursday. Last day to file application for Doctoral Certification Examination (Ed.D./Ph.D.) to be given February 17 or February 24.

Thursday. Last day to file notification in Office of Doctoral Studies of intention to defend Ph.D. and Ed.D. dissertation during Spring Term 2012.

Tuesday. Last day to add and drop courses for Spring Term 2012, file a Certificate of Equivalency, and for new students to enroll in or waive the Health Service Program and the Columbia Student Medical Insurance.

Wednesday. Last day to file or to renew an application, in Registrar's Office, for Master's degrees and certificates to be awarded in May. (After this date, application may be filed only until February 15 upon payment of $\$ 25$ late fee.)

Wednesday. Requests for late registration under exceptional circumstances on or after this date require Registrar's approval and payment of $\$ 100$ late registration fee.

Friday. Last day to complete the final deposit of Ed.D. dissertation with the Office of Doctoral Studies for the February 8 award of degree.

Friday. Last day to complete the final deposit of Ph.D. dissertation with the Graduate School of Arts and Sciences for the February 8 award of degree.
Wednesday. Award of February degrees and certificates. No ceremony.
Tuesday. Last day to change points in variable-point courses
Friday. Doctoral Certification Examination (Ed.D./Ph.D.) for students not majoring in an area of psychology, 9:00 a.m. to 12 noon and 1:45 p.m. to 4:45 p.m.

Friday. Doctoral Certification Examination (Ed.D./Ph.D.) for students majoring in an area of psychology, 9:00 a.m. to 12 noon and 1:45 p.m. to 4:45 p.m.

Thursday. Last day to submit, to the Registrar's Office, formal Master's essay for May award of degree.
Thursday. Midterm date, Spring Term 2012.
Sunday-Sunday. Spring Holidays.
Monday. Registration for the Summer and Autumn Term for continuing students via web. Registration begins.
Monday. Last day to hold the dissertation defense (Ed.D./Ph.D.) for May award of degree.
Friday. Last day to deposit Ed.D. dissertation and abstracts, for May award of degree.
Tuesday. Last Day of Classes. End of Spring Term 2012.
Wednesday. Termination of occupancy in Teachers College residence halls for Spring Term 2012 for students not remaining for Summer Session A. Extensions granted for graduating students participating in Commencement.
Friday. Last day to complete the final deposit of Ph.D. dissertation with the Graduate School of Arts and Sciences for the May award of degree.

Tuesday. Teachers College Master's degrees Convocations.
Wednesday. University Commencement, Conferring of degrees, 10:30 a.m. Teachers College Doctoral degrees Convocation, 2:00 p.m.

Friday. Termination of occupancy in Teachers College residence halls for Spring 2012 for students not remaining for Summer Session, but who participated in Commencement.


# Arts and Humanities 

## PROGRAMS:

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## DEPARTMENTAL MISSION:

The Department of Arts and Humanities is dedicated to the study of a variety of academic and professional disciplines in an educational context. The Department's mission is two-fold: To promote proficiency in specific fields and to explore the purposes, practices, and processes of education both within-and across-disciplines.

Within the Department, individual programs preserve their own disciplinary rigor while expanding modes of inquiry, discovery, and creation across disciplines and diverse societies and cultures. The Department is committed to understanding culture as a broad and varied process-a fundamental human activity involving various modes of thinking and expression through which meaning is constructed and historically transmitted.

The Department views the study of education as broad and vital. Here, intellectual and creative ideas and practices extend beyond the traditional concerns of schooling. Thus, each program shares a concern with the learner's construction of knowledge, the art and methods of teaching, the realities of the contemporary classroom, the relationship of schools to their communities, and the underlying philosophies of school reform.

In each of the programs that prepare teachers for positions in schools and universities, there is a commitment to the education of reflective practitioners, the integration of theory and improvement of learning, as well as research and practice in the students' chosen fields of study.

Faculty share the view that informed, imaginative and critical thinking enables scholars and educators to actively shape cultural concepts of learning through education. With this in mind, the programs-both separately and together-offer students the skills and knowledge needed to thrive and assume leadership in today's changing cultural and educational environment.

## FACULTY:

## PROFESSORS:

Harold F. Abeles (Music)
Judith M. Burton (Art)
Steven Dubin
(Arts Administration)
David T. Hansen (Philosophy)
Janet L. Miller (English)
Ernest Morrell (English)
Maria Torres-Guzman
(Bilingual/Bicultural)
Ruth Vinz (English)

## PROFESSORS EMERITI:

Maxine Greene
(Philosophy and Aesthetics)
Robbie McClintock (Philosophy)

## ADJUNCT PROFESSORS:

Ronald Knapp (Social Studies)
Bert Konowitz (Jazz)

## ASSOCIATE PROFESSORS:

John M. Broughton (Cultural Studies)
Lori Custodero (Music)
ZhaoHong Han (TESOL/Applied Linguistics)
Marc L. Hill (English)
William Gaudelli (Social Studies)
Megan Laverty (Philosophy)
Anand Marri (Social Studies)
Carmen Martinez-Roldan
(Bilingual/Bicutural)
Lenore M. Pogonowski (Music)
James E. Purpura
(TESOL/Applied Linguistics)
Cally L. Waite (History)

## ADJUNCT ASSOCIATE PROFESSORS:

Evelyn Chen (Piano)
Alvin Fossner (Oboe, Saxophone)
Franklin Horowitz (TESOL/Applied
Linguistics)
Joy Moser (Painting)
Jean-Marc Oppenheim (Social Studies)

## ASSISTANT PROFESSORS:

Randall Everett Allsup (Music)
Ansley Erickson (History)
Olga Hubard (Art)
Michael Kieffer (TESOL/Applied Linguistics)
Sandra Schmidt (Social Studies)
Yolanda Sealey-Ruiz (English)
Hansun Waring (TESOL/Applied
Linguistics)

## VISITING ASSISTANT PROFESSOR:

Patricia Martinez (Bilingual/Bicultural)

## ADJUNCT ASSISTANT PROFESSORS:

Philip Aarons (Arts Administration)
Sergio Andrade Bessa (Museum Education)
Sheyda Ardalan (Art)
John Beaumont
(TESOL/Applied Linguistics)
Della Brooks (Social Studies)
Lorraine Cella (English)
Jasmin Cowin (Harp)
Sheila Dauer (Social Studies)
Monika Ekiert (TESOL/Applied Linguistics)
James Frankel (Music)
John Gavalchin (Piano)
Andrew Henderson (Organ)
Richard Jacobowski (Guitar)
Richard Jochum (Art \& Multimedia)
Ami Kantawala (Art)
Meredith Katz (Social Studies)
I. Fred Koenigsberg (Arts Administration)

John D. Kuentzel (Religion)
Lori McCann (Voice)
Angelo Miranda (Percussion)
Kristine Roome (Art)
Lisa Jo Sagolla (Art)
Patricia St John (Music)
Linda Wine (TESOL/Applied Linguistics)

## SENIOR LECTURERS:

Sheridan Blau (English) — Distinguished
Senior Lecturer
Dwight Manning (Music)

## LECTURERS:

Carolin Fuchs (TESOL/Applied Linguistics)
Jeanne Goffi-Fynn (Music)
Kirby Grabowski
(TESOL/Applied Linguistics)
Barbara Hruska
(TESOL/Applied Linguistics)
Vivian Lindhardsen
(TESOL/Applied Linguistics)
William Snyder (TESOL, Tokyo)
Bette Weneck (History)
Howard A. Williams
(TESOL/Applied Linguistics)
Patricia Zumhagen (English)

## INSTRUCTORS:

William Becker (Arts Administration) John Browne (English)
Carolyn Clark (Arts Administration) Mahbobe Ghods (Print Making)
Ardina Greco (Museum Education)
Louise Kuklis (Social Studies)
Naomi Lifschitz-Grant (Art)
Thomas Lollar (Ceramics)
Jane McIntosh (Arts Administration)
Kerry McKibbin (English)
Alison Merkel (Social Studies)
Maurizio Pellegrin
(Sculpture \& Mixed Media)
Peter Swords (Arts Administration)
Ashley Taylor (Social Studies)
Barbara Tischler (Social Studies)
Melissa Troise (English)
Gerard Vezzuso (Photography)
Martin Vinik (Arts Administration)
Barbara Wolkoff (Arts Administration)
Scott Wylie (Social Studies)

For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit us at www.tc.edu/faculty.

## GENERAL ARTS \& HUMANITIES COURSES

The Department of Arts \& Humanities offers an array of courses that can meet the out-ofprogram requirement for students enrolled in any of the A\&H programs or elsewhere in the college. These courses reflect the broad span of interests across A\&H programs.

A\&H 4008. Creative arts laboratory (0-3) Professor Pogonowski. Experiential sessions in dance, music, story-telling, videography, and visual arts will enable students to design and enact arts experiences that facilitate development of critical and creative thinking skills in core curricula. Special fee: $\$ 50$.

A\&H 4048. Computing applications in education and the arts (2 or 3)
Professor Abeles. This course will examine strategies for developing creativity and prob-lem-solving behaviors employing arts and other educational software. Pedagogical principles underlying the design of the software and instructional applications will be reviewed. Special fee: $\$ 75$.

## Cultural Studies

A\&H 4060. Youth cultures (2-3)
Professor Broughton. Issues in adolescent/early adult subculture formation. Effects on learning, school, college, employment. Alienation,
resistance, creativity. Literary-aesthetic approaches to symbolic styles, fashions, movements,and cults. Multicultural/class/gender differences. Special fee: $\$ 45$.

## A\&H 4061. Introduction to cultural

 studies (2-3)Faculty. Theory, method and research in the emerging field of cultural studies in education. Mass culture and school culture as learning environments interpreted from arts and humanities perspectives: structuralism/poststructuralism, semiotics, discourse and film analysis, psychoanalysis, ideology-critique, identity politics, feminism, queer theory. Special fee $\$ 45$

A\&H 4065. Media and visual culture (2-3) Faculty. The relationship of contemporary education to the new visual literacies. Critical responses to the new media and the dominance of screen/image in learning. Changes in teaching required for non-traditional technologies and settings. Special fee $\$ 45$.

A\&H 4088. Popular culture (2-3)
Professor Broughton. Critical examination of mass communication as an informal medium of education: film, TV, comic books, music, dance, advertising, "low" vs. "high" culture and hybrid forms. Enrollees learn to create and promote their own pop-cultural commodity. Special fee: $\$ 40$.

A\&H 4089. Aesthetics of technology (2-3) Professor Broughton. Technology as a cultural form regulating the development of the human self. Metaphysical, symbolic and fantasy components in computing, space travel, medicine, reproduction, and children's toys. Literary and artistic representations. Special fee: $\$ 40$.

A\&H 4130. Gender and violence (2-3) Faculty. How literal and symbolic violence shape gender formation. Aggression in the lives of men and women. Racism, homophobia, child-abuse, date-rape, demonism, guns and bombs, in reality, art, and fiction. Special fee: $\$ 40$.

## A\&H 5001. Research methods in arts

 education (3)Faculty. An examination of research studies and strategies for conducting research in the arts. Special fee: $\$ 25$.

## A\&H 5002. Assessment strategies for

 the arts (3)Faculty. An examination of traditional and alternative strategies for assessing art objects and artistic performance, knowledge of the arts, and attitudes toward the arts.

## ARTS AND Humanities

A\&H 5010. Special topics in arts and humanities (1-3)
Faculty. Focus on topics and issues using existing documents, studies and multimedia to support investigations into critical issues in arts and humanities.

A\&H 5500. Pro-seminar in arts and humanities (2)
Faculty. Arts and Humanities Faculty present their recent research to illuminate critical issues in the field, current challenges to education, innovative methods of inquiry and contemporary cultural issues.

## APPLIED LINGUISTICS

Program Coordinator:
Professor ZhaoHong Han
Program Office: (212) 678-3795
Email: tesolal@tc.edu
Website: www.tc.edu/a\&h/tesolal

## Degrees Offered:

APPLIED LINGUISTICS (LING)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## Program Description:

The Program in Applied Linguistics provides students with a solid foundation for defining and resolving questions related to the nature of language, how it is used in educational and naturalistic contexts, and how it is taught, learned, and evaluated. The Program emphasizes study in the following:

- Acquisitional pragmatics
- Conversation analysis
- Cross-cultural pragmatics
- Discourse analysis
- Foreign language pedagogy
- Interlanguage analysis
- Language phonetics/phonology
- Language testing and assessment
- Second language acquisition
- Second language literacy
- Semantics
- Sociolinguistics
- Syntax
- Technology in applied linguistics


## Special Application <br> Requirements/Information:

All non-native speakers of English, including those who have an undergraduate degree from a university in the United States, must submit one of the following:

- A total minimum score of 102 on the TOEFL IBT exam. Also a minimum score of 26 on the speaking and writing sections and a minimum of 25 on the reading and listening sections; or
- A minimum score of 600 on the paper/ pencil TOEFL or a minimum score of 250 on the TOEFL CBT. Also a minimum score of a 50 on the Test of Spoken English (TSE) and a minimum score of 5 on the Test of Written English (TWE); or
- A score of B or better on the Cambridge Certificate of Proficiency in English (CEP);
- A score of 7.0 or better on the Cambridge International English Language Testing System (IELTS).

Students are expected to write and speak in a way that is appropriate to their professional
responsibilities. Students having difficulty in achieving these standards will be required to take additional coursework. All non-native speakers of English, including those who have an undergraduate degree from an Englishmedium university, must submit language proficiency scores. Expired scores will not be accepted.

Ed.M./Ed.D. applicants must have an M.A. in Applied Linguistics, TESOL, or related field; a writing sample is also required.

Ed.M. applicants may request to transfer up to 30 points into the Applied Linguistics Program from previous graduate study at an accredited institution. Applicants who have already earned an M.A. from Teachers College may request to transfer a maximum of 15 points in related areas from an outside institution. Ed.D. students may request to transfer up to 45 points from previous graduate study at an accredited institution. All transfer of points must be relevant to the degree program enrolled in and must meet the approval of a faculty advisor.

## Degree Requirements:

A grade average of $B$ or higher is required each semester within the major for all degrees. Students are required to maintain satisfactory academic progress toward degree completion. Consult program of study guides for additional information.

## Master of Arts (36 points)

The Applied Linguistics Program offers a 36 point Master of Arts degree. Students will take a wide range of courses offered in Applied Linguistics and related areas, such as TESOL, that will provide breadth to their program. See program sheet for prerequisite for the Ed.M.

## Courses in Applied Linguistics

(or TESOL) (24 points):

- A\&HL 4001 Sociolinguistics
- A\&HL 4085 Pedagogical English
* A\&HT 4077 grammar (3)
* A\&HT 4077 TESOL classroom practices (3)
- A\&HL 4087 Introduction to second
- A\&HL $4088 \quad \begin{aligned} & \text { language acquisitio } \\ & \text { Second language }\end{aligned}$
assessment (3)
- A\&HL 4101 Phonetics and phonology (3)
- A\&HT 5380 Specialized practica for or 5383 TESOL teachers (3)

One course from the following:

- A\&HL 4104 Discourse analysis (3)
- A\&HL 4105 Conversation analysis (3)
- A\&HL 4106 Text and textuality (3)

Required out-of-program breadth courses (3 TC courses of at least 2 points each, 6 points minimum): Chosen with advisor's approval.

Elective courses in Applied Linguistics (or TESOL) (3-6 points): Consult an advisor. Students must complete a master's project written on a research topic arising from their course-related interests and subject to approval by their advisor. This project is normally completed during the last semester of study.

## Master of Education (60 points)

The Applied Linguistics Program offers an Ed.M. that requires 60 points beyond the bachelor's degree, with a minimum of 30 points taken under the auspices of Teachers College. The program involves in-depth study in one or more of the language-related areas. The Ed.M. may serve as continued professional development or as groundwork for future doctoral studies in applied linguistics.

Students who did not receive their M.A. from Teachers College will be expected to have completed all the required courses from the M.A. in Applied Linguistics, below, or their equivalent. These "make-up" courses will not count towards the Ed.M.

## Required courses in Applied Linguistics (or TESOL)

- A\&HL 5085 Advanced syntax (3)
- A\&HL 5575 Research literacy in applied linguistics and TESOL (3)

Electives in Applied Linguistics (or TESOL) ( 3 courses from the following):

- A\&HL 4003

Schools of linguistic analysis

- A\&HL 4005

Semantic systems and the lexicon

- A\&HL 4014 Gender, language, and
- A\&HL 4105
- A\&HL 4106
- A\&HL 5008
- A\&HT 5000 education

Advanced topics in TESOL

- A\&HT 5087 Second language acquisition
in the classoom (3)
- A\&HL 5512 History of language
- testing research
- A\&HL 5515 Advanced topics in
- A\&HL 5516 applied linguistics I
-A\&HL5516
Advanced topics in
applied linguistics II
- A\&HL 5517 Advanced topics in
- A\&HT 5519 Instructed second language
- A\&HL 5581 acquisition and assessment (3)
- A\&HL 5581 Psycholinguistics and SLA
- A\&HL 5582 Sociolinguistics and SLA
- A\&HL 5588 Trends in SLA research
- A\&HL 6087 Advanced SLA

Required out-of-program breadth courses (3 Teachers College courses of at least 2 points each, 6 points minimum): In consul-
tation with an advisor, choose one from the following courses in statistics, measurement, or research design:

- C\&T 5502 Introduction to qualitative research in curriculum and teaching (2-3)
- HUDM 4050 Introduction to
- HUDM 4122 Probability and statistical

HUDM $\quad$ inference (3)

- HUDM 5123 Linear models and
- ITSF 4092 experimental design (3)
- ITSF 4092 Qualitative research and evaluation in international education (3)
- ITSF 5000 Methods of inquiry: Ethnography and participant observation (or ITSF 5001 or 5002) (3) - ORLJ 4009 Understanding behavioral research (3)

Choose the other two required courses in consultation with an advisor.

In addition, students must complete an Ed.M. project written on a research topic arising from their course-related interests and subject to approval by their advisor.

## Doctor of Education (90 points)

The Applied Linguistics Program offers an Ed.D. requiring 90 points beyond the baccalaureate for students wishing to pursue empirical research in linguistic analysis, discourse analysis, sociolinguistics, cross-cultural and acquisitional pragmatics, second language acquisition, language pedagogy, and language assessment.

Students who did not receive their M.A. or Ed.M. from Teachers College will be expected to have completed all the required courses, or their equivalent, from these degree programs.

Doctoral students have three types of requirements: concentration requirements, research methods requirements, and doctoral preparation requirements.

## Concentration Requirements:

Students are required to take content courses in their concentration. The exact courses should be decided in consultation with their advisor.

## Research Methods Requirements (15 points):

To ensure that students have the skills to do scholarly research in an area of concentration, they are required to take a minimum of 15 points in research methods, statistics, and measurement. Depending on the type of dissertation, they may be asked to take additional courses in linguistic analysis, qualitative methods, or quantitative methods.

Three courses from the following:

- C\&T 5502 Introduction to qualitative research in curriculum and teaching (2-3)
- HUDM 4050 Introduction to measurement
- (2-3)
- ORLJ 4009 Understanding behavioral
- HUDM $4122 \quad \begin{aligned} & \text { research (3) } \\ & \text { Probability and statistical }\end{aligned}$
- ITSF $4092 \quad$ inference (3) $\quad$ Qualitative research and evaluation in international education (3)
- ITSF 5000 Methods of inquiry: Ethnography and participant observation (or ITSF 5001 or 5002) (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6051-2 Psychometric theory I and II (3)
- HUDM 6055 Latent structure analysis (3)
- HUDM 6122 Multivariate analysis I (3)
- One of the qualitative research methods courses offered at the college (To be chosen with faculty advisor's approval). Electives in TESOL or Applied Linguistics (9): To be chosen with an advisor's approval.


## Doctoral Preparation Requirements:

When doctoral students reach approximately 45 points in the program and have been at Teachers College for at least one year, they are required to register for and attend a doctoral seminar every semester.

Doctoral preparation involves three successive stages:

1. Exposure to basic research methods
2. Identification of a dissertation topic
3. Presentation of a prospectus

In order to progress through these stages, doctoral students are required to take a sequence of doctoral seminars at the $5500,6500,7500$, and 8900 levels. Students begin to take these courses when they have reached approximately $45-50$ points in the program and after they have been taking courses at Teachers College for a minimum of one year. After that, doctoral students are required to register for and attend doctoral seminars every semester.

Doctoral students are required to demonstrate research preparedness in a substantive area by passing the research paper at the 5500 level, the certification exam at the 6500 level (6500A), and the certification paper at the 6500 level (6500B). Then, as evidence that they are able to carry out original research under the guidance of a doctoral committee,

## ARTS AND Humanities

they must write a dissertation prospectus at the 7500 level as a part of the dissertation seminar and complete a doctoral dissertation while continuously registered for dissertation advisement at the 8900 level.

To prepare for these requirements, students will need to take one or more of the seminars in consultation with an academic advisor. These seminars occur at the $5500,6500,7500$, and 8900 levels. All of these seminars are offered each semester. To determine which seminar to register for, consult an academic advisor.

- A\&HL 5501 Research paper in applied linguistics (1-3)
- A\&HT 5505 Research paper: TESOL (1-3)
- A\&HL 5507 Research paper in applied linguistics and TESOL (1-3)
- A\&HL 6501 Doctoral seminar in applied linguistics (1-3)
- A\&HT 6505 Doctoral seminar: TESOL (1-3)
- A\&HL 6507 Doctoral seminar in applied linguistics and TESOL (1-3)
- A\&HL 7501 Dissertation seminar in applied linguistics (1-3)
- A\&HL 7505 Dissertation seminar: TESOL (1-3)
- A\&HL 7507 Dissertation seminar in applied linguistics and TESOL (1-3)
- A\&HL 8901 Dissertation advisement in applied linguistics (0)
- A\&HT 5505 Research paper: TESOL (1-3)
- A\&HT 6505 Doctoral seminar: TESOL (1-3)
- A\&HT 7505 Dissertation seminar: TESOL (1-3)

These seminars are ordinarily undertaken as soon as possible after completing the M.A. degree. Students should consult advisor as to which course or courses to enroll in during any particular semester.

Candidates should be in touch with the Office of Doctoral Studies to be certain of complying with the latest procedures, deadlines, and documents.

COURSES: (* = course open to non-majors)

## General Courses

*A\&HL 4000. Introduction to linguistics (3) Faculty. Survey of cognitive and social approaches to the study of language, language acquisition, language systems, 20th century movements in linguistics, language varieties and attitudes, and forms and functions of language in the classroom. For non-majors only. Special fee: $\$ 20$.

## A\&HL 4001. Sociolinguistics and

 education (3)Dr. Wine. Language variation based on social class, race, ethnicity, age, and gender; crosscultural pragmatics, interactional sociolinguistics, code-switching, language planning, and World Englishes. Pedagogical implications. Materials fee: $\$ 25$.

A\&HL 4003. Schools of linguistic analysis (3)

Dr. Williams. Prerequisite: A\&HL 4085. A comparative examination of major approaches to linguistic analysis, specifically systemic and transformational, with particular reference to pedagogical applications. Special fee: $\$ 20$.

A\&HL 4005. Semantic systems and the lexicon (3)
Dr. Horowitz. A comparative examination of lexical semantic systems of English and other languages, with particular reference to the teaching and learning of vocabulary. Special fee: $\$ 20$.

A\&HL 4014. Gender, language, and education (3)
Faculty. An exploration of gender-based differences in both the structure and use of the English language (summers only). Special fee: $\$ 20$.

A\&HL 4085. Pedagogical English grammar (3) Faculty. A systematic, in-depth examination of English grammar with particular reference to the teaching and learning of grammar. Special fee: $\$ 20$.

A\&HL 4087. Introduction to second language acquisition (3)
Professor Han \& Staff. Prerequisite: A\&HL 4085. Survey of models and basic principles of second language acquisition and examination of how language acquisition research can inform language teaching, learning and policy. Offered in fall and spring only. Special fee: $\$ 20$.

A\&HL 4088. Second language assessment (3) Professors Purpura and Grabowski. Prerequisite: A\&HL 4085, A\&HL 4087 or permission of instructor. Priority given to M.A. Applied Linguistics/ TESOL students in their last semester. Introduction to language assessment practices including test design, construction, scoring, analysis and reporting; introduction to measurement concepts and basic statistics; and use of SPSS. Special fee: $\$ 20$.

A\&HL 4101. Phonetics and phonology (3) Dr. Williams. An examination of the sound and orthographic systems of English, with reference to other languages and problems of learning and teaching English. Lab fee: $\$ 25$.

A\&HL 4104. Discourse analysis (3) Dr. Waring. Prerequisite: A\&HL 4085. Introduction to spoken and written discourse
analysis with an overview of various approaches. Development of transcription skills with applications for teaching and research. Materials fee: $\$ 20$.

A\&HL 4106. Text and textuality (3)
Dr. Williams. Permission of instructor. Explores various viewpoints on the production and comprehension of connected discourse, both written and oral, with reference to cohesive devices, rhetorical structures, and the general pragmatics of communication, with attention to pedagogical applications. Offered spring semester only. Special fee: $\$ 20$.

A\&HL 5008. Interlanguage analysis (3) Professor Han. Corequisite: A\&HL 4087. Investigates processes underlying second language development/non-development. Guided by the instructor, students will examine empirical SLA studies and be introduced to ways of conducting interlanguage analysis. Special fee: $\$ 20$.

A\&HL 5085. Advanced syntax (3) Dr. Williams. Prerequisite: A\&HL 4085.
Survey of generative syntax. Materials fee: $\$ 20$.
A\&HL 5152. Academic writing I (3)
Faculty. Permission of instructor required. An introduction to the theory and teaching of various genres of academic writing for native and non-native writers. Teachers are given opportunities to develop their academic writing skills.

A\&HL 5153. Academic writing II (3)
Faculty. Permission of instructor required. An advanced course in the theory and teaching of expository writing. Students will work systematically on a major writing project.

A\&HL 6087. Advanced second language acquisition (3)
Professor Han. Prerequisite: A\&HL 4087. Examines theoretical and empirical issues in SLA research. Reading and discussion of selected state-of-the-art articles that address, critically and substantively, topics that are of fundamental interest to SLA researchers.

## Research Seminars

A\&HL 5512. History of language testing research (3)
Professor Purpura. Prerequisite: A\&HL 4088 or by permission of instructor. Examines the major issues and debates in language testing research since the 1960s. Explores controversies related to the nature of language ability, test authenticity, test score generality, performance assessment, and test validation. Discussion of problems and future directions of language testing. Special fee: $\$ 20$.

A\&HL 5515. Advanced topics in applied linguistics I (3)
Faculty. Permission of instructor required.
Research in such areas as language analysis,
language acquisition, and language pedagogy. Materials fee: $\$ 20$.

A\&HL 5516. Advanced topics in applied linguistics II (3)
Faculty. Permission of instructor required. Research in various methods of sociolinguistic analysis, discourse analysis, textual analysis and conversation analysis. Materials fee: $\$ 20$.

A\&HL 5517. Advanced topics in language assessment (1-6) Professor Purpura. Course is designed to explore current issues in language assessment research from theoretical and methodological perspectives. This course examines the application of technical issues such as reliability, validation, generalizability theory, item-response theory, or program evaluation to the analysis and use of language assessment data. Specific topics vary. This course may be repeated for credit with change of topic.

A\&HL 5575. Research literacy in applied linguistics and TESOL (3)
Faculty. Introduction to quantitative and qualitative research methods with discussion of major research paradigms (experimental, ethnographic, introspective, questionnaire, etc.) and critical review of professional literature in applied linguistics and TESOL.

A\&HL 5581-A\&HL 5588. Topics in second language acquisition (Noncredit or 1-3 each course)
Faculty. Prerequisites: A\&HL 4087 or A\&HL 4104 or permission of instructor. An in-depth examination of various perspectives on second language acquisition. Materials fee: $\$ 20$ each course.

- A\&HL 5581. Psycholinguistics and SLA
- A\&HL 5582. Sociolinguistics and SLA
- A\&HL 5585. Discourse analysis and SLA
- A\&HL 5586. Interlanguage phonology
- A\&HL 5588. Trends in SLA research

A\&HL 6587. Seminar in second language acquisition: Acquisitional and cross-cultural pragmatics (3)
Faculty. Permission of instructor required. Prerequisite: A\&HL 4104 or permission of instructor. Research on acquisitional and cross-cultural pragmatics. Special fee: $\$ 20$.

## Doctoral Preparation

A\&HL 5501. Research paper in applied linguistics (1-3)

A\&HL 5505. Research paper in applied linguistics and TESOL (1-3)

A\&HL 5507. Research paper in applied linguistics and TESOL (1-3)

A\&HL 6501. Doctoral seminar in applied linguistics (1-3)

A\&HL 6505. Doctoral seminar in applied linguistics and TESOL (1-3)

## A\&HL 6507. Doctoral seminar in

 applied linguistics and TESOL (1-3)A\&HL 7501. Dissertation seminar in applied linguistics (1-3)

A\&HL 7505. Dissertation seminar in applied linguistics and TESOL (1-3)

A\&HL 7507. Dissertation seminar in applied linguistics and TESOL (1-3)

A\&HL 8901. Dissertation advisement in applied linguistics (0)

## Independent Research, Fieldwork and Internships

A\&HL 4901. Research and independent study: Applied linguistics (1-6) Professor Purpura. Permission of instructor required. Research under the direction of a faculty member. Students work individually or with others. Course may be taken more than once.

A\&HL 4907. Research and independent study: Applied linguistics/TESOL (1-6) Professor Han. Permission of instructor required. Research under the direction of a faculty member. Students work individually or with others. Course may be taken more than once.

## A\&HL 5201. Fieldwork in applied

 linguistics (1-6)Professor Purpura. Permission of instructor required. Opportunity for qualified students, individually or in small groups, to develop and pursue projects, in consultation with an advisor, in schools, communities, and other field settings. Course may be taken more than once.

A\&HL 5207. Fieldwork in applied linguistics and TESOL (1-6)
Professor Han. Permission of instructor required. Opportunity for qualified students, individually or in small groups, to develop and pursue projects, in consultation with an advisor, in schools, communities, and other field settings. Course may be taken more than once.

A\&HL 6201. Advanced fieldwork in applied linguistics and TESOL (1-6) Professor Purpura. Permission of instructor required. Opportunity for qualified students, individually or in small groups, to develop and pursue projects, in consultation with an advisor, in schools, communities, and other field settings. Course may be taken more than once.

A\&HL 6207. Advanced fieldwork in applied linguistics and TESOL (1-6) Professor Han. Permission of instructor required. Opportunity for qualified students, individually or in small groups, to develop and pursue projects, in consultation with an advisor, in schools, communities, and other field settings. Course may be taken more than once.

## ART AND ART EDUCATION

Program Coordinator:
Professor Judith M. Burton

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\begin{array}{ll}
\text { Program Office: } & \text { (212) 678-3360 } \\
\text { Email: } & \text { burton@gmail.com } \\
\text { Website: www.tc.edu/a\&h/ArtEd }
\end{array}
$$

## Degrees Offered:

ART AND ART EDUCATION (ARTE)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Education in the College
Teaching of Art (Ed.D.C.T.)
ART AND ART EDUCATION-
initial certification (ARTE-INIT)
Master of Arts (M.A.)
ART AND ART EDUCATIONPROFESSIONAL CERTIFICATION (ARTE-PROF) Master of Arts (M.A.)

## Program Description:

In the Art and Art Education Program, the study of art encompasses the traditions of fine art and the popular arts of culture. A central tenet of the Program is the role of the arts in nurturing human growth and development throughout the lifespan. Within this context, courses in art education examine the different environments in which the various art forms reach their audiences: Private and public schools, colleges, museums, community arts centers, hospitals and other such settings.

Faculty prepare students to be well informed, critical thinkers so that they may enter leadership positions in their professions. Faculty are not only seasoned practitioners who possess expertise in art, studio, museum, and diversity education, they are also national leaders in arts education research.

Each of the Program's degree options is built around a core of courses considered to be essential to an exemplary arts education. Beyond the core, students along with their advisors have the flexibility to design individual programs that meet particular needs and goals. In addition to courses in art education, students are expected to select from other offerings of Teachers College and Columbia University in order to fulfill degree requirements, or the Museum Education concentration. (see Special Application Requirements section for more information).

The vast cultural resources of New York City offers students myriad opportunities to enrich
their conceptions of art and its diverse practices. In addition, the program offers weekend institutes, colloquia, mini-courses, opportunities for involvement in professional development workshops and summer study. Suitably qualified students may also apply for apprenticeships in the Center for Arts Education Research where they may assist on funded projects.

## Special Application Requirements/Information:

All applicants are required to submit a portfolio (slides, CD, video, or original works), examples of scholarly writing (papers, thesis, publications), and the Art and Art Education Application Supplement directly to the Office of Admission. Art \& Art Education Application Supplement is available at: http://www.tc. columbia.edu/admissions/arted. Applicants must have completed an undergraduate degree in studio art, art education, art history or criticism, art or museum education, or present other evidence of competence.

For the M.A. degrees, a personal interview with a faculty advisor is advised. For the Ed.D. and the Ed.D.C.T. degrees, an interview with the Program Coordinator is required.

All applicants for whom English is not their first language are required to submit either a 100 internet-based/600 paper-based/ 250 com-puter-based TOEFL score or a score of 10 on the Columbia University English Language certification test. An in-person writing sample may also be requested.

The 34 -point M.A. degree is specially designed for individuals seeking in-service opportunities, who wish to complete a special project, or who need the master's degree to complete professional certification. However, the student should seek professional certification with the State board as this degree program is not meant to directly lead the student through the certification process.

The 40 -point M.A. degree leading toward New York State initial teacher certification is a State-approved program for those wishing to teach art in grades K-12 in public schools. This program enrolls in the fall only.

The 60 -point Ed.M. degree is designed for individuals seeking the highest level of professional achievement within the arts in education. The degree is also designed for students contemplating future doctoral study. Applicants are required to have a minimum of three years of experience as an educator or practicing professional in the arts; 30 points of prior
graduate study may be transferred provided they meet the requirements for the degree. Within the Ed.M degree students may craft specializations in: Museum Education, Leadership in Arts Education and Research. Applicants for these options must have professional experiences in the field.

The 90 -point Ed.D. and Ed.D.C.T. degrees are designed for individuals interested in serious research and who wish to contribute new scholarship and practice to the field. Applicants are required to have five years of professional experience in arts/museum/studio education. For both degrees, applicants are accepted to the Program following faculty review of their artistic, professional and scholarly materials. In some instances, applicants may be requested to complete prerequisites as a condition of entry to the program. Similarly, applicants may be requested to complete the Ed.M. degree prior to consideration for acceptance to the Ed.D.

The 90 -point Ed.D. in Art and Art Education is designed for those wishing to teach art education at the college/university level, become arts supervisors in school systems, education curators in museums, administrators in arts agencies or enter other arts education leadership positions. Applicants for this degree are expected to exhibit strong writing skills.

The 90 -point Ed.D.C.T. is designed for those wishing to teach studio art, history, or criticism in higher education: Art school, college or university. Applicants for this degree program will be expected to have an established, critically reviewed, exhibition record either nationally or internationally.

## Degree Requirements:

MASTER OF Arts (34 points) Required courses in Art Education (24 points):

- A\&H 5001 Research methods in arts education or
- A\&H 5005 Visual arts research methods
- A\&HA 4080 Artistic development
- A\&HA 4081 Curriculum design
- A\&HA 4281 Field observations in art education (two terms) (1 point each)
- A\&HA 4085 Historical foundations of art education
- A\&HA 4088 Artistic development: Adolescence to adulthood
- A\&HA 5082 Philosophies of art in education
- Studio course required
- A\&HA 5922 Master's seminar in art education


## Required courses outside the program

(6 points): Chosen with advisor approval. Three TC courses (each course must be for a minimum of 2 points) outside of the program.

Elective courses from: Art Education, studio, other programs of the College (4 points): Chosen with advisor approval.

In addition, students in this M.A. program are required to complete a master's culminating project on a theme or research topic arising from their interests.

A three-year summer INSTEP Master of Arts degree is offered by the program. This degree may be used for New York State Professional Certification for individuals who hold initial certification and have the necessary credentials. For details about the Summer INSTEP program requirements and schedule see: www.tc.columbia.edu/instep/. Contact Ms. Amanda Newman-Godfrey, Program Office (instep_art@tc.edu)

## Master of Arts with Initial <br> Teacher Certification (40 points) Required courses in Art Education (20 points minimum):

- A\&HA 4079 Exploring cultural diversity: Implications for art education
- A\&HA 4080 Artistic development of children
- A\&HA 4081 Curriculum design in art education
- A\&HA 4085 Historical foundations of art education
- A\&HA 4087 Processes and structures in the visual arts
- A\&HA 4088 Artistic development: Adolescence to adulthood
- A\&HA 4090 Museum education issues I: Culture of art museums or
- A\&HA 5090 Museum education issues II: Missions and standards
- A\&HA 4281 Field observations in art
- A\&HA 4702 Supervised student teaching
- A\&HA 4722 Supervised student teaching
- Studio Courses in art education: Elementary


## Required courses outside the Program

(6-9 points): Chosen with advisor approval. Three TC courses (each course must be for a minimum of 2 points) outside of the Program.

## Elective courses from: Art Education,

 studio, other programs of the College (4 points): Chosen with advisor approval.In addition to coursework, students in this program are required to complete an integrated curriculum project on a theme or research topic arising from their interests and their practicum experiences. Students are also required to mount a Macy Gallery exhibition combining their own art work with that of the pupils taught during their practica.

Note: To be certified by New York State, there are additional requirements. Please consult the Teacher Education section of this bulletin for details.

## Master of Education (60 points)

Required courses in Art Education (21 points minimum):

- A\&H 5001 Research methods in
- A\&H 5005 Visual arts research
- A\&HA 4079 Exploring cultural diversity: Implications for art education
- A\&HA 4080 Artistic development of children
- A\&HA 4081 Curriculum design in art education
- A\&HA 4088 Artistic development: Adolescence to adulthood
- A\&HA 5082 Philosophies of art in education
- A\&HA 5086 Art in visual culture
- A\&HA 5922 Master's seminar in art education
- Studio course (two terms)


## Required courses outside the Program

(6 points): Chosen with advisor approval. Three courses (each course must be for a minimum of 2 points) outside of the Program.

## Elective courses from: Art Education,

 studio, other programs of the College (variable points): Chosen with advisor approval.In addition, Ed.M. students may choose to take a museum concentration as part of their degree. This concentration explores the art museum as an educational institution, introduces students to object-based teaching and learning, and offers them an overview of educational programs in museums throughout New York City.

The museum concentration consists of the following five courses, which must be taken in addition to other Ed.M. requirements: A\&HA 4090, Museum education issues I: Culture of art museums; A\&HA 5090, Museum education issues II: Missions and
standards; A\&HA 5084, Museums as resource; A\&HA 5085, Varieties of visual experience; and A\&HA 4079, Exploring cultural diversity.

Doctor of Education (90 points) Required courses within the specialization (21 points):

- A\&H 5001

Research methods in arts education or

- A\&H 5005 Visual arts research methods
- A\&HA 4080 Artistic development of children
- A\&HA 4085 Historical foundations
- A\&HA 5082 Philosophies of art in education
- A\&HA 5086 Art in visual culture
- A\&HA 6502 Doctoral seminar: Arts in education
- A\&HA 7502 Dissertation seminar in art education (two terms)
- A\&HA 8900 Dissertation advisement in art education

Required courses outside the Program ( 15 points minimum): Chosen with advisor approval.

## Elective courses from Art Education,

 independent studio, studio, other programs of the College (points vary): Chosen with advisor approval.Students must complete between 50-60 points in the program, including those transferred, before entering the first of the dissertation seminars. The first seminar begins the process of preparing students for doctoral certification. Doctoral Certification consists of four phases:

- Writing the problem statement
- Writing the qualifying papers
- Preparing the dissertation of the proposal
- Public presentation of the proposal
- Public presentation of professional accomplishments.

The doctoral certification process is accomplished through a series of seminars and independent study and based on faculty review. Students must complete each level satisfactorily before they are given permission to write the dissertation. Candidates should be in touch with the Office of Doctoral Studies to be certain of complying with the latest procedures, deadlines and documents.

## Doctor of Education in the

College Teaching of Art (90 points) Required courses within the specialization ( 25 points):

- A\&HA 4088 Artistic development: Adolescence to adulthood

| - A\&HA 5005 | Visual arts research <br> methods <br> Curriculum design in art |
| :--- | :--- |
| - A\&HA 5081 | education: Advanced |
| - A\&HA 5082 | Philosophies of art <br> in education |
| - A\&HA 5086 | Art in visual culture |
| - A\&HA 6002 | Teaching and administration <br> of art education in college |
| - A\&HA 6482 | Internship in the teaching <br> of college and museum <br> programs |
| - A\&HA 6502 | Doctoral seminar: <br> A Arts in education |
| - A\&HA 7502 | Dissertation seminar in <br> art education (two terms) |
| - A\&HA 8900 | Dissertation advisement <br> in art education |

Required courses outside the Program (15 points minimum): Chosen with advisor approval. Must include a minimum of two 3 credit point classes in Higher Education.

Suggested studio electives: Chosen with advisor approval.

In addition, requirements for the dissertation for the Ed.D.C.T. may be met by combining studio work and a written document. Candidates should be in touch with the Office of Doctoral Studies to be certain of complying with the latest procedures, deadlines, and documents.

COURSES: ( ${ }^{*}=$ course open to non-majors)

## Art Theory and Research

*A\&HA 5005. Visual arts research methods (2-3)
Dr. Kantawala. This course explores art education as a form of inquiry that is grounded in the theories, practices, and contexts used by practitioners. It introduces students to ways of creating and critiquing knowledge and developing strategies for planning and carrying out art education research projects. Building on traditions in the social sciences, and practices inherent in the visual arts, the view explored is that research goals can be achieved by following rigorous systematic inquiry in a way that privileges the role imagination and intellect play in constructing and creating knowldege.

## A\&HA 5082. Philosophies of art in education (2-3)

Faculty. Corequisite A\&HA 4202. An invitation to share a horizon of objectives in the form of philosophical, critical, and practical cases in art education. Students will discuss philosophically how art could be expressed on the grounds of experimentation that could take place in either the studio, the classroom, in both, or in an environment that students deem conducive to art and/or art education. Special fee: $\$ 15$.

# ARTS AND Humanities 

A\&HA 5181. The arts in education (2-3) Faculty. An examination of ideas about the interdisciplinary role of the arts in traditional and nontraditional educational and administrative settings through analysis of programs, projects, policy issues, and political processes that involve the visual arts, dance, music, and theater. Special fee: $\$ 30$.

A\&HA 5086. Art in visual culture (2) Dr. Moser and guest critics. Corequisite A\&HA 5063. Permission of instructor required. Required seminar for Ed.M. and Ed.D. students. An examination of the role of art culture in contemporary life, employing experiences from art works, museums, galleries and alternative spaces, readings, and discussion. Special fee: $\$ 25$.

A\&HA 6003. Critical perspectives and practices in the arts (2)
Faculty. Students investigate their creative practice from several critical perspectives and produce personal profiles and arts projects within educational and cultural contexts. Special fee: $\$ 25$.

## A\&HA 6502. Doctoral seminar:

Arts in education (2)
Dr. Sagolla. Required seminar for doctoral students who are completing certification papers, developing literature reviews or exploring and applying research methods. The seminar includes faculty/student presentations, group discussions and critiques.

## A\&HA 6580. Problems in art and

 education (2-4)Faculty. Specific problems of art and art education examined. Different topics each semester. Permission of instructor required. Special fee: \$15.

## A\&HA 7502. Dissertation seminar in

 art education (2)Professor Burton. Two required tutorial sessions for doctoral students to help develop or refine topics of inquiry for research. The teaching format is flexible and may include faculty/student presentations, group discussions and critiques. May be repeated. Section 2 is required of all doctoral students in the program in the semester following successful completion of written certification papers and involves preparation and presentations of dissertation proposal for approval. Sections: (1) Certification preparation, (2) Dissertation proposal preparation.

## A\&HA 8900. Dissertation advisement

 in art education (0)Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D. degree.

## Art Education

*A\&H 4000. MoMA roundtable (2-3)
Faculty. This course guides students in the creation of interdisciplinary secondary curriculum inspired by artworks from MoMA's collection. Far from making certain subject areas subservient to others, each discipline lends to the process its unique ways of knowing, contributing towards common educational goals. Current disciplines: Art, English, and Social Studies.

## A\&HA 4003. Encounters with art

 history (2-3)Professor Hubard. Examines various stories put forth by seminal art historians and engages students with selected artworks from various times and places. Students contribute to the ongoing process of art history by responding critically and creatively to key texts and objects from the history of art.
*A\&HA 4001. Culture, museums and education I (3)
Faculty. This course is designed for educational practitioners of different disciplines who have an interest in incorporating the visual arts into their teaching. Visits to museums and from diverse cultural leaders are central features of the course. Serious exploratory play with materials will offer opportunities to deepen artistic insights- as a complementary language of learning.

A\&HA 4199. Culture, museums and education II (3)
Professor Olga Hubard. This course is designed for educational practitioners of different disciplines who have an interest in incorporating the visual arts into their teaching and who wish to enhance their artistic skills in greater depth. Art Practice will be explored as a vehicle for considering relationships between maker and cultural objects. Visits to museums and from diverse cultural leaders are central features of the course. Serious exploratory play with materials will offer opportunities to deepen artistic insights- as a complementary language of learning.
*A\&HA 4078. Art for classroom teachers: Teaching art to children (3)
Ms. Lifschitz-Grant. Introduction to theories of artistic development. Uses of art materials and processes, and lesson planning strategies for art experiences with children and young adolescents. Designed for classroom teachers and in-service students. Special fee: $\$ 60$.

A\&HA 4079. Exploring cultural diversity: Implications for art education (Noncredit or 2-3)
Professor Hubard. This course explores a host of issues related to cultural diversity and examines their impact on the practices of art and art education. Teachers reflect about curriculum content, pedagogical approaches and human relations in the diverse art room.

## *A\&HA 4080. Artistic development

 of children (2-3)Professor Burton. Corequisite A\&HA 4281. Required of all candidates seeking New
York State art teacher certification (K-12). Recommended for all degree candidates in elementary education. An examination of the role of the senses, emotions, and intellect in artistic development and of the layered integrations they form over time. Discussion of ways in which developmental insights are basic to the design and implementation of exemplary visual arts lessons and offer critical starting points for research. Special fee: $\$ 30$.

A\&HA 4081. Curriculum design in art education (2-3)
Dr. Schifano. Corequisite A\&HA 4202. Introduction to curriculum theory and design in the larger context of education and schooling. The course also explores alternative conceptual models as reflected in different art curricula, and engages students in review of curricular issues related to learning outcomes, standards and assessment in art education. Special fee: $\$ 30$.

## A\&HA 4085. Historical foundations of

 art education (2-3)Dr. Kantawala. Corequisite A\&HA 4202. An introduction to major historical events and underlying beliefs, values, and practices that have influenced contemporary art and art education programs at all levels of instruction in the U.S. as well as internationally. Special fee: $\$ 30$.

A\&HA 4086. Current issues and practices in art and art education (2-3)
Faculty. An analysis of current philosophies, theories, and practices in art and art education at all levels of instruction. Programs in public schools, higher education, museum education, and other non-traditional settings are examined, along with advocacy initiatives and policy issues appropriate to the various issues discussed. Special fee: $\$ 30$.

## A\&HA 4087. Processes and structures

 in the visual arts (3)Professor Burton. Suggested for all students in all degree programs. Opportunity for in-depth and sustained exploration of the properties, structures, and expressive uses of selected art materials. The course aims to enrich and extend personal visual repertoires and in parallel, provoke insights into the role of materials in supporting, integrating and challenging the artistic growth of young people in school. Special fee: $\$ 75$.
*A\&HA 4088. Artistic development: Adolescence to adulthood (2-3)
Professor Burton. Corequisite A\&HA 4281. An examination of sensory, biological, affective, cognitive, and cultural issues influencing continuing development in the visual arts. Discussion of ways in which developmental insights are basic to designing challenging lessons which enrich growth and learning as well
as offering critical starting points for research. Required of all candidates seeking New York State Art Certification K-12. Special fee: $\$ 30$.
*A\&HA 4090. Museum education issues I: Culture of art museums (3)
Ms. Greco. An examination of the challenges facing art museums in the twentieth century, with a focus on changing interpretations of objects and how museums respond to public need. Special fee: $\$ 25$.

## A\&HA 4281. Field observations in

 art education (1)Ms. Ardalan, Dr. Kantawala. Required of M.A. students or art teacher certification majors. To be taken concurrently with A\&HA 4080, Artistic development of children, and A\&HA 4088, Artistic development: Adolescence to adulthood. Involves observations in schools of various types; videotaping of contrasting teaching styles and curricular approaches; analysis of perceptual, artistic, and societal assumptions implicit within programs observed.

A\&HA 4702. Supervised teaching in art education: Secondary (3)
Faculty. Prerequisites: A\&HA 4080, A\&HA 4081, A\&HA 4087, and A\&HA 4088. M.A. candidates should plan to take student teaching in their last semester of coursework towards their degree. For majors only. A variety of supervised teaching experiences (7-12), supplemented by conferences, evaluation, and seminars. The student completes 200 hours in schools observing, assisting, teaching, and evaluating. Required of those seeking state certification in art in New York State and other states. Special fee: $\$ 15$.

A\&HA 4722. Supervised student teaching in art education: Elementary (3) Faculty. Prerequisites: A\&HA 4080, A\&HA 4081, A\&HA 4087, and A\&HA 4088. M.A. candidates should plan to take student teaching in their last semesters as final coursework towards their degrees. For majors only. A variety of supervised teaching experiences (K-6) supplemented by conferences, evaluation, and seminars. The student completes 200 hours in an elementary school observing, assisting, teaching, and evaluating. Required of those seeking state certification in New York State and other states. Special fee: $\$ 15$.
*A\&HA 5064. Experiments in content (2-3) Faculty. An examination of new technologies, materials, concepts, attitudes, both in their current forms as well as future applications. Participants will investigate a personal topic through field experience, hands-on demonstration, observation, readings and lectures. The topic focuses for the course will be drawn from art and design/studio/research/psychology/teaching. Special fee: $\$ 30$.

A\&HA 5081. Curriculum design in art education: Advanced (3)
Faculty. An analysis of art as a form of knowledge and how this knowledge informs the curriculum. The course relates notions of knowledge with the contexts and the practices of art in view of contemporary practice and the teaching of art in post-secondary and higher education. Prerequisite: A\&HA 4081 or consent of instructor. Special fee: $\$ 30$.

A\&HA 5085. Varieties of visual experience: Museums and education (2)
Faculty. Participants will visit New York City museums and use the multiple resources of the museums to develop personalized curriculum materials. Enrollment limited. Special fee: $\$ 30$.
*A\&HA 5090. Museum education issues II: Missions and standards (3)
Dr. Bessa. An examination of the changing purposes of museums, both American and international, as they confront new technologies and expectations for greater participation in education. Issues of ethics and standards for museum education will also be discussed in the context of the section reform movement. Special fee: $\$ 25$.
*A\&HA 5804. Museums as resource: Workshops at the Metropolitan Museum (1-4)
Ms. Greco. Independent study at Teachers College combined with workshops, lectures and seminars at the Metropolitan Museum of Art. Students work collaboratively with both Museum and College faculty to develop and carry out individual projects, which may lead to research and inquiry, or to the development of instructional materials for different levels of schooling.

A\&HA 5922. Master's seminar in art education (2)
Professor Hubard. Corequisite A\&HA 6202. Permission of instructor required. Required for all M.A. and Ed.M. students. Guided independent work in research, culminating in the development of a master's proposal. Special fee: $\$ 30$.

A\&HA 6002. Teaching and administration of art education in college (3)
Faculty. A practical and theoretical ground for the discussion, development and implementation of pedagogical philosophies, strategies and practices by which art and design specialists come to teaching as professed in art and design programs in higher education. The course attends to pedagogical discourses and practices; the administration of art as a discipline; and studio practice and art teaching as an instrument of professional development. Special fee: \$15.

A\&HA 6021. Supervision and administration: Arts in education (3)
Faculty. Permission of instructor required. Prerequisite: Substantial teaching and/or arts administration experience. The function of supervision and administration: Effective pro-
grams in city, county, and state school systems; inservice education and workshop techniques; school and community relationships; nontraditional settings such as museums, arts councils, etc. Special fee: $\$ 15$.

A\&HA 6520. Seminar in clinical supervision in the arts: K-12 (2) Faculty. Permission of instructor required. Seminar in classroom supervision and its application to student teaching and inservice training. On-site field experience, analysis of observation and assessment, readings and discussion. Participants must have a minimum of 5 years of teaching experience. Special fee: $\$ 10$.

## Studio Art

*A\&HA 4061. Printmaking I: Lithographic processes (Noncredit or 2-3)
Dr. Ghods. A basic course in lithography for the beginning student. Stones, metal plates, screens, photo-lithographic plates, and silkscreen utilized. Group and individual instruction to enhance the skills and aesthetic perception of each student. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.

## *A\&HA 4062. Printmaking: Etching I

(Noncredit or 2-3)
Dr. Ghods. Designed to introduce the beginner to the intaglio process (hard and softground etching, etc.). Group and individual instruction to help students acquire printmaking skills and discover their artistic capabilities. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.

## *A\&HA 4063. Introduction to painting

 (Noncredit or 2-3)Professor Hubard. Development of fundamental painting skills and understandings within the quest for individual expression and style. Oils, acrylics, collage, and watercolor employed. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.

## *A\&HA 4084. Art and technology

(Noncredit or 2-3)
Faculty. How do artists deploy technology in their art making? This class will examine mutual influences of art and technology and look at forms of using technology in the arts and for classroom instruction. Students will learn to design presentations in a variety of media and applications. The course combines hands-on elements, lab time, critical analysis, and practical experiences through individual development. Students will learn or improve their ability to work with images, sound, and media files. The goal is to facilitate a creative use of technology without much prior knowledge.
*A\&HA 4089. New media, new forms: Technological trends in art education (2-3) Dr. Jochum. Examines new technological tools and new media in art education, the impact of technology in the art room, the changing role of
the art educator, and the convergence of visual technologies. Offered summers. Enrollment limited. Special fee: $\$ 25$.
*A\&HA 4092. Introduction to ceramics (Noncredit or 2-3)
Mr. Lollar. Enrollment limited. For beginners only. Introduction to the basic techniques of hand building, the potters wheel and slab construction. Surface decoration and three-dimensional design. Stoneware and earthenware clay bodies and firing procedures will be addressed. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 4093. Introduction to sculpture (Noncredit or 2-3)
Faculty. An exploration into the world of the third dimension through both figurative and abstract styles. There will be studio experimentation and discussion around working with wood, clay, stone, plaster and metal. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.

## *A\&HA 4094. Introduction to photography

 (Noncredit or 2-3)Mr. Vezzuso. An introductory course in black and white photography and darkroom techniques. Participants will study applications of the camera as an instrument for producing artistic images, and the darkroom as a setting for reproducing those images, as well as the implications for using these techniques within various educational settings and contexts. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 4096. Photography for educators (Noncredit or 2-3)
Faculty. Exploration of basic photo techniques applicable in the standard art classroom. Special fee: $\$ 100$. Noncredit fee: $\$ 600$.
*A\&HA 5060. Introduction to drawing (Noncredit or 2-3)
Faculty. A critical examination of the relationship among structure, form and surface in drawing from life: objects, humans and landscape. Students will track the emergence and development of expressive configurations in their own work from the vantage point of evolving aesthetic and critical responses. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 5061. Advanced printmaking:
Lithography (Noncredit or 2-3)
Dr. Ghods. Designed to explore and develop the lithography printing process, including the use of color and photolithography. Group and individual instruction to promote the artistic and technical potential and capacities of each participant. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 5062. Advanced printmaking: Etching (Noncredit or 2-3)
Dr. Ghods. Designed to expand the printmaking competencies and aesthetic development of the artist-teacher. Group and individual instruction. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 5063. Advanced studio
(Noncredit or 2-3)
Dr. Moser and Mr. Pellegrin. Artists capable of independent endeavor share their ideas and work in critiques and discussions and undertake advanced artistic problems suggested by the instructor or of their own devising. Noncredit fee: $\$ 600$. Special fee: $\$ 100$.
*A\&HA 5092. Advanced ceramics (Noncredit or 2-3)
Mr. Lollar. Further studies of ceramics with an emphasis on individual projects on an advanced level. Educational aspects of the medium will be discussed along with marketing opportunities for the professional craftsperson. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 5093. Advanced sculpture (Noncredit or 2-3)
Faculty. Further studies of sculptural elements with an emphasis on content, craft, and individual development. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 5095. Color photography (2-3) Mr. Vezzuso. Prerequisite: A\&HA 4094 or equivalent. Course addresses both the aesthetic and technical aspects of color photography including theory, lighting, use of positive and negative films, prints, and exposure to a professional lab. Special fee: $\$ 100$.

## *A\&HA 5890. Exploring creative photo-

 graphy: Advanced processes (Noncredit or 2) Faculty. Prerequisite: A\&HA 4094 or equivalent. This course explores the versatility of photography and incorporates other artistic mediums as artists have done since the development of photography in the 19th century. In investigating traditional and contemporary photographic methods students will acquire skills in advanced methods in processing and presenting work. A range of darkroom techniques will be introduced along with sophisticated studio equipment. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.*A\&HA 5890. Exploring creative photography: Invention and imagination (Noncredit or 2)
Faculty. The emphasis in this course is on the inventive, explorative and imaginative use of the photographic medium. The power of the interpretive value of the photographic image is explored. Students are exposed to the work of photographers that experiment with photography in an important but imaginative way.
*A\&HA 5891. Exploring creative photography: Photography and light (Noncredit or 2)
Faculty. The emphasis in this class is on the camera and on using light and lighting methods and advanced camera and darkroom techniques. Students explore the use of Medium Format cameras, studio lighting, flash photography, long exposures using tripods and using light meters. Photographic projects are undertaken
using themes of still life, tabletop and portrait photography using flash and available lighting.

## Independent Studio Work: 3 Courses

A\&HA 6902. Studio work in art and education: Sculpture (Noncredit or 1-4) Faculty. Permission of instructor required. Enrollment limited. For advanced independent study. Noncredit for majors only. Special fee: $\$ 100$.

A\&HA 6903. Studio work in art and education: Drawing (Noncredit or 1-4) Faculty. Permission of instructor required. Enrollment limited. For advanced independent study. Noncredit for majors only. Special fee: $\$ 100$.

A\&HA 6904. Studio work in art and education: Painting (Noncredit or 1-4) Faculty. Permission of instructor required. Enrollment limited. For advanced independent study. Noncredit for majors only. Special fee: $\$ 100$.

A\&HA 6905. Studio work in art and education: Printmaking (Noncredit or 1-4) Faculty. Permission of instructor required. Enrollment limited. For advanced independent study. Noncredit for majors only. Special fee: $\$ 100$.

A\&HA 6906. Studio work in art and education: Ceramics (Noncredit or 1-4) Faculty. Permission of instructor required. Enrollment limited. For advanced independent study. Noncredit for majors only. Special fee: $\$ 100$.

## A\&HA 6907. Studio work in art and

 education: Photography (Noncredit or 1-4) Faculty. Permission of instructor required. Enrollment limited. Prerequisites: A\&HA 4094, A\&HA 5094 or extensive experience in photography and darkroom techniques. For advanced independent study. Noncredit for majors only. Special fee: $\$ 100$.
## A\&HA 6999. Exhibition/presentation

 rating (0)Faculty. Rating of certification Ed.M. and Ed.D. exhibitions offered in fulfillment of degree requirements. To be taken during the semester in which work is presented in the Macy Art Gallery. Special fee: $\$ 100$.

## Independent Studies and Research

A\&HA 4202. Fieldwork in art education (1-4) Faculty. Permission of instructor required. Professional activities in the field under faculty supervision.

A\&HA 4902. Research and independent study in art education (1-4)
Faculty. Permission of instructor required. Research and independent study under the direction of a faculty member.

A\&HA 5202. Fieldwork in art education (1-4)
Faculty. Permission of instructor required. Professional activities in the field under the supervision of a member of the arts faculty.

A\&HA 5902. Research and independent study in art education (1-4)
Faculty. Permission of instructor required. Research and independent study under the direction of a faculty member.

A\&HA 6202. Fieldwork in the art education (1-4)
Faculty. Permission of instructor required. Professional activities in the field under the supervision of a member of the arts faculty.

A\&HA 6422. Internship in the supervision and administration of the art education (1-4) Faculty. Permission of instructor required. Qualified students work as interns with supervisors or administrators in selected sites. Provision is made for assessment of field-based competencies in fulfillment of program requirements.

A\&HA 6482. Internship in the teaching of college and museum programs (3) Faculty. Permission of instructor required. Guided experiences in the teaching of the arts in departments of metropolitan area colleges. Sections: (1) Teaching art programs: college, (2) Teaching art programs: museum.

A\&HA 6972. Research and independent study in art education (1-4)
Faculty. Permission of instructor required. Research and independent study under the direction of a faculty member.

## ARTS <br> ADMINISTRATION

Program Coordinator:

Professor Steve Dubin

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\begin{array}{ll}
\text { Program Office: } & \text { (212) 678-3268 } \\
\text { Email: } & \text { sd2188@tc.columbia.edu }
\end{array}
$$

Website: www.tc.columbia.edu/artsadmin

## Degree Offered:

ARTS ADMINISTRATION (AADM)
Master of Arts (M.A.)

## Program Description:

The program in Arts Administration encourages integration of all the arts and education, while focusing on the educational role of the artist, and the missions and activities of arts and cultural agencies, collectives, and institutions.

The program reflects the conviction that the management of cultural institutions and enterprises is a profession that requires both creativity and commitment and that, at its best, the profession has a positive impact on the quality of artistic life. Arts Administration is organized in conjunction with the programs in Arts and Humanities education, further reflecting the importance of the basic educational role, mission, and activities of the arts in both profit and nonprofit sectors.

In order to respond to the challenge and responsibility of the arts at the start of the twenty-first century, the arts manager must have an amalgam of managerial and financial skills, a knowledge of pertinent artistic disciplines, an awareness of community dynamics, a commitment to education in its broadest sense, and a sensitivity to the artist and the artistic process. The essence of the program lies in its effort to provide a carefully constructed core curriculum while making available the extraordinary range of intellectual and cultural resources of the College, the University, and New York City.

The objectives of the program are to:

- train new leaders to manage and administer arts and cultural venues;
- raise standards of arts administration to a new level of social responsibility;
- broaden the horizons of arts educators, facilitating their interactions with the arts community;
- give arts educators new management and administrative tools;
- strengthen advocacy roles for artists; and
- provide theoretical and practical preparation for students whose professional objective is a career in arts administration, arts education, or a combination of the two.


## Special Application Requirements/Information:

In addition to the general Teachers College admission requirements, applicants to the program must submit a third letter of reference and scores on the GRE General Test. Personal statements of 750-1000 words should indicate why applicants wish to pursue careers in arts administration, what led them to this point and what they feel makes them good candidates for admission to the program and to the field. An interview is required for finalists and will be arranged at any time in the application process by the program coordinator/director. Students begin the program in the fall semester only and cannot defer.

## Degree Requirements:

## Master of Arts (60 points)

The M.A. degree requires a minimum of 60 points of coursework, with 24 points from the program offerings listed below, 12 points through the Graduate School of Business, 15 points in Teachers College courses, 9 elective points, an internship, and a formal master's essay.

The core curriculum represents an unusual alliance among the faculties of Teachers College, Columbia's Graduate School of Business, and the School of Law. Included in the core requirements are principles of arts administration, policy, fundraising, historical foundations and problem-solving in arts education, accounting, financial planning, marketing, business, policy, labor relations, and copyright law. Students and applicants should refer to additional information on requirements available at the program office. Tuition rates may vary for non-TC courses, depending on the offering school. Each student is evaluated in the first year to ensure that satisfactory progress is maintained.

COURSES ( $*=$ course open to non-majors):
A\&HG 4170. Principles and practice in arts administration (3)
Faculty. Permission from program coordinator/director required. Basic overview in arts administration covering major areas of concern to small, medium, and large institutions. Specific aspects of arts management, planning, program development, artist relations, marketing, and fundraising.

A\&HG 4173. Arts in context (3)
Professor Dubin. Permission of program coordinator/director required. A seminar and lec-ture-style course designed to provide a cultural context for discussions of aesthetic, ethical, and political questions that define and challenge the responsible arts administrator's role.

A\&HG 4174. Law and the arts I (3)
Mr. Koenigsberg. Permission from program coordinator/director required. Principal artistic applications of U.S. law in areas drawn from copyright law, unfair competition and trademark law, misappropriation, First Amendment questions, miscellaneous torts including rights of privacy and publicity, defamation, interference with contract, and other problems relating to authenticity of art works.

A\&HG 4175. Law and the arts II (3) Mr. Swords, Ms. Clark, and Mr. Aarons. Permission from program coordinator/director required. Lectures and seminars on not-forprofit corporations, alternative forms of organization and tax exemption; the role and problems of trustees, directors, and officers; and commercial and political activity, administrative regulations concerning arts organizations, and arts-specific contracts.

## A\&HG 4176. Support structures:

Development and fundraising in the arts and humanities (3)
Ms. McIntosh. Permission from program coordinator/director required. A practical exploration of fundraising research and proposal writing methods. Proposals are developed for private and public agencies and foundations. Course incorporates aspects of support for the arts, arts education, the humanities, education, and artists.

A\&HG 4180. Labor-management relations in the arts (3)
Mr. Becker, Ms. Wolkoff. Permission from program coordinator/director required. Theory and practice. Special emphasis on employers, unions, contracts, and grievance procedures in the arts. Simulated bargaining sessions, evaluation and discussion of dispute resolution, arbitration, contract results. Negotiation by student teams.

A\&HG 4575. Master's seminar in arts administration (3) Faculty. Permission from program coordinator/director required. Full-time degree candidates only. Required for all master's students by the last 10 points of their program. Guided independent work culminating in the development of a master's essay.

A\&HG 4576. Master's seminar in arts administration B: Research apprenticeship (3) Faculty. Interview required. Supervised individual apprenticeship to ongoing projects in arts management, arts law, arts and cultural policy and data and information gathering on living artists.

A\&HG 5173. Principles and practice in arts administration: Performing arts (3) Mr. Vinik. Permission from program coordinator/director required. Prerequisite: A\&HG 4170. A continuation of A\&HG 4170 with special reference to the management principles and skills of the performing arts, including music, dance, and theater; audience development; unions; and the study of physical facilities.

A\&HG 5174. Principles and practice in arts administration: Visual arts (3)
Faculty. Permission from program coordinator/director required. Prerequisite: A\&HG 4170. A continuation of A\&HG 4170 with special reference to the application of management principles and skills to the visual arts, including museums, commercial and cooperative galleries, artists' spaces, public art, and corporate and individual collectors and artists.

A\&HG 5175. Business policy and planning for the arts manager (3) Mr. Vinik. Permission from program coordinator/director required. Designed to integrate arts administration coursework from business, law, and the arts. Moves from the financial, cultural, and political environment to strategic planning tools to specific arts situations in the creation and implementation of policy and planning objectives.

A\&HG 5178. Special topics: Critical issues in arts management (3)
Faculty. Permission from program coordinator/ director required. A course in conceptualizing problems. Use of existing documents, studies, policies and databases to support investigations into critical issues, while identifying how these documents have been constructed, their hidden and political agendas, and suggestions for improvement and integration into existing systems.

## Practicum and Internship

A\&HG 4370. Practicum in arts administration and arts education (1) Faculty. Permission from program coordinator/director required. Supplement to the required internship. Work with organizations or on projects on or off-campus; work must meet test of relevance to student's program of study, supervisor approval, and judgment of satisfactory performance. At least 30 hours during the term; no more than 1 point per term; no more than 3 points during the course of the program for practicum.

## A\&HG 4470. Internship in arts

administration and arts education (0 or 3) Faculty. Permission from program coordinator/director required. Internship arranged with host institutions on an individual basis, taking into account the student's needs, interests and capacities, and the host's abilities to integrate
those with its operation in an educationally useful manner. Twenty hours per week over four months or the equivalent.

## Independent Research

A\&HG 4970. Supervised individual research in arts administration and arts education (3)
Faculty. Permission from program coordinator/ director required. Independent research in arts administration.

## A\&HG 4100. Master's essay: Arts administration (0)

 Faculty. Permission from program coordinator/director required. To maintain continuous residency and receive advisement on the master's essay, students who have registered for the 60 required points of coursework and have not completed the master's essay must continue to register for this course after six terms including summers. Special tuition: the equivalent of 1 point of credit.
## A\&HG 5179. Making sense of censorship

 (3)Professor Dubin. Uses a multi-disciplinary approach to examine the twin phenomena of censorship and freedom of expression, historically and at present. Censorship will be investigated as a social process, intricately linked with power, knowledge, production, group struggles, and social change. Students will explore its causes and consequences, and strategies of intervention.

See also:
A\&H 4048. Computing applications in education and the arts (3)

## A\&H 5001. Research methods in arts

 education (3)A\&H 5002. Assessment strategies for the arts (3)

A\&HA 4079. Exploring cultural diversity: Implications for art education (2-3)

A\&HA 4090. Museum education issues I: Culture of art museums (3)

A\&HA 5082. Philosophies of art in education (2-3)

A\&HA 5090. Museum education issues II: Missions and standards (3)

A\&HA 5181. The arts in education (2-3)
A\&HA 5804. Museums as resource:
Workshops at the Metropolitan Museum (1-4)
A\&HA 6021. Supervision and administration: Arts in education (3)

## BILINGUAL/BICULTURAL EDUCATION

Program Coordinator:
Professor Maria Torres-Guzman
Program Office: (212) 678-3758
Email: bilingual-bicultural@tc.edu
Website: www.tc.edu/academic/Bilingual/

## Degrees Offered:

BILINGUAL/BICULTURAL STUDIES (BILG)
Master of Arts (M.A.)
BILINGUAL/BICULTURAL CHILDHOOD
EDUCATION - DUAL CERTIFICATION
(BILC-DUAL)
Master of Arts (M.A.)
BILINGUAL/BICULTURAL EDUCATION . InItIAL CERTIFICATION (BILG-INIT/PROF)
Master of Arts (M.A.)
BILINGUAL/BICULTURAL CHILDHOOD
EDUCATION - TRANSITIONAL B CERTIFICATION (BILC-TRAN)
Master of Arts (M.A.)
BILINGUAL/BICULTURAL EDUCATION -
InITIAL CERTIFICATION (BILG-INIT)

## Certificate

## Program Description:

In our increasingly diverse world, the study of multiple languages-in-education is in demand. The Program in Bilingual/Bicultural Education acknowledges the need to provide students with a foundation for understanding and working with bilingual learners in diverse educational settings. Our program specializes in education that privileges language minority student populations in the U.S. and in the world.

Students who select the course of study offered by our program will be prepared to work in schools, community organizations, and international agencies as teachers, specialists, consultants, curriculum designers, and evaluators. Students may also pursue an interest in policy and research and/or continue further studies.

Through our courses, students will examine the phenomenon of multiple languages and cultures in schools, classrooms, and communities within local and global contexts. The courses will allow students to explore interests in teaching in schools where more than one language and culture are part of the curriculum, particularly within the multilingual, multicultural city schools of New York, and to explore how the local and unique situations of schools connect to those found in other parts of the world. Furthermore, students can observe and work in enrichment language education models that will enable them to develop the understanding and working
knowledge necessary to educate language minorities while working with the goal of developing proficiency in more than one language for both language-majority and minori-ty-students. Students will examine the nature of cross-cultural understanding and knowledge, as it provides support and access for language minority school populations to respect, develop, and preserve their languages within educational settings, to develop and strengthen their identities, and to go beyond their selves to engage in the world as productive citizens. The courses will also help students explore their place within the context of the presence of multiple language and cultures in schools and communities and in promoting diversity in thinking and social justice in the U.S. and beyond.

Courses within the different departments will allow students to explore the distinction between regular general education teaching and teaching in settings where the curriculum is taught in more than one language, second language learning theory, literacy, and interdisciplinary intellectual endeavors.

Students will plan an appropriate course of study, according to their background, knowledge, and experiences and in relation to their future goals, with their advisor. Students are strongly advised to plan the whole curriculum during their first semester, so as to meet all requirements and to enjoy the multiple possible field experiences in educational settings. Students are also urged to go to the program website (www.tc.edu/academic/its/bilingual) for FAQ's to explore the multiple strands available at the M.A. level, New York State requirements for certification, the doctoral program, and distinctions in the different fields of study that might be important in the selection of the area of Bilingual/Bicultural Education as a major.

## Courses of study:

Students who are U.S. citizens or permanent residents may pursue a course of study that leads to NY State certification. Students ought to choose a course of study based on their previous studies and experiences and career goals. The following section describes offerings in the Program in Bilingual/Bicultural Education:

- M.A. in Bilingual/Bicultural Studies

This 33 -point course of study provides students with flexibility to pursue a policy, research, or teaching strand. The program is fully registered with the New York State Education Department. The teaching strand within this course of study does not lead to NY State certification.

- M.A. in Bilingual/Bicultural Childhood Education (Dual Certification)

For students with no teacher certification who want to teach in elementary schools. This course of study aims to prepare educators to work in bilingual settings that privilege the education of language-minority students. It leads to NY State certification in Childhood Education (grades 1-6) with a Bilingual Education extension. It also has the potential for extending dual certification to include Middle Childhood Education certification (grades 7-9); interested students should discuss this possibility with an advisor. Within the course of study are two streams:
a. Stream A is for students without prior experience in education and requires 40 points of coursework.
b. Stream B, for students who have studenttaught, have taught full-time for a minimum of one year, or are presently teaching, requires 33 points of courses.

- M.A. Program in Bilingual/Bicultural Childhood Education (Transitional B Certification)

Peace Corps Fellows with no teacher certification who want to teach in elementary schools may pursue the 33 -point Transitional B course of study. This course of study aims to prepare educators to work in bilingual settings that privilege the education of language-minority students in low-resource schools. The program meets the requirements for NY State certification in Childhood Education (grades 1-6) with a Bilingual Education extension and has the potential for extending dual certification to include Middle Childhood Education certification (grades 7-9). Only students approved by the Peace Corps Fellows Program (www.tc.columbia.edu/pcfellows) are eligible for admission. As part of the program, students must complete a special intensive 200hour pre-component in the summer and be placed in a school as a teacher. Students will receive supplementary mentoring throughout the year.

## - M.A. Program in Bilingual/Bicultural Education (Initial Certification)

Students who have teacher certification in any area and an interest in a Bilingual Extension should follow this 33 -point course of study. This program aims to prepare educators to work in bilingual settings that privilege the education of language minority students. It leads to NY State professional certification in the area in which students already hold certification and, in addition, leads to Bilingual
certification. Students who have teaching certificates in elementary or secondary education can also pursue Middle Childhood Education certification (grades 7-9).

- Advanced Certificate in Bilingual/Bicultural Education

The 15 -point Advanced Certificate course of study is for students who are pursuing NY State teacher certification in another area or who already hold NY State teacher certification. In addition, students who hold baccalaureate degrees but do not wish to pursue master's degrees may enroll. The course of study leads to NY State Bilingual Extension certification.

## Special Application Requirements/Information:

In addition to the Teachers College admission application, prospective students must submit the following:

- Program application (available from the Office of Admission or program website)
- Proof of Language proficiency (please see program application)

Proficiency in English and a language other than English (LOTE) are required for the Program in Bilingual/Bicultural Education, as well as for the the courses of study leading to NY State certification. Students must provide proof of proficiency in a language other than English by showing evidence of education or extended residence abroad; undergraduate coursework; or language proficiency scores (such as the GRE, SAT, or Peace Corps Assessment). Students must also submit their statement of interest in English and the LOTE. International students must submit TOEFL scores.

For further information, contact:
Program in Bilingual/Bicultural Education
Teachers College, Columbia University
525 West 120th Street, Macy 351
P.O. Box 122A

New York, NY 10027
Telephone: (212)678-3758
Email: bilingual-bicultural@tc.edu

## Degree Requirements:

All courses of study require three core foundational courses and a bilingual inquiry course. M.A. programs require an integrative project. The teaching strands with Bilingual/Bicultural Studies and the courses of study programs leading to NY State certification require a practicum or student teaching experience. Students are strongly urged to consult with an academic advisor on all degree requirements.
Foundation and Inquiry Courses:

- A\&HB 4021 Foundations of bilingual/ bicultural education (3)
- A\&HB 4024

Linguistic foundations of bilingual/bicultural education (3)

- A\&HB 4075 Cross-cultural communication and classroom ecology (3)
- A\&HB 4150 Teacher/educational inquiry: Bilingual/bicultural education (1-3)

Each student will choose courses with their advisor's assistance. The following shows a sample of recommended courses for potential concentrations.

Concentration on Research: Choose among the following.

- ITSF 4015

Latinos in urban schools

- ITSF 5016 Ethnography of education
- A\&HL 4003 Schools of linguistic analysis
- A\&HL 4104 Discourse analysis
- A\&HL 4106 Text and textuality
- A\&HL 5008 Interlanguage analysis
- HUDF 5020

Methods of social research: survey methods

- HUDF 5022 Sociological analysis of
- C\&T 5000 educational systems
curriculum and teaching
- HBSK 5085 Observing and assessing preschool children

Concentration on Policy: Choose courses among the following:

- ITSF 4025 Languages, society, and schools
- A\&HB 5024 Bilingual/multilingual education: International perspectives
- A\&HB 4199 Current topics in bilingualism and bilingua/ bicultural education (topics vary term by term)
- HUDF 4000 Education and public policy
- ORLF 5042 Urban politics and education
- ORLF 5045 Race, ethnicity and U.S. educational policy
(Policy courses in Curriculum and Teaching)
Concentration on Teaching (not leading to NYS certification): Choose among courses that are required for programs leading to certification.
Courses of study leading to certification require the following:
- A\&HB 4020 Bilingualism and disabilities (1)
- A\&HB 4028 Teaching literacy in
bilingual settings (3)

| - A\&HB 4121 | Bilingual/bicultural <br> curriculum design in <br> elementary and middle <br> schools (3) |
| :--- | :--- |
| - A\&HB 4133 | Curriculum and methods <br> for bilingual teachers: |
| - A\&HB 4134 | Science (2-3) <br> Curriculum and methods <br> for bilingual teachers: |
| - A\&HT 4076 | Mathematics (2-3) <br> TESOL methodologies <br> for K-6 (3) |

Master of Arts programs leading to certification (Stream A) require one full year of student teaching with the accompanying courses (a total of 17 additional credits), for a total of 40 credits for the degree.

Master of Arts programs leading to dual (stream B), transitional B, and initial certification require a half-year of student teaching (a total of 7 credits), for a total of 33 credits for the degree.

Master of Arts programs leading to certification (professional) require one semester of a practicum, which is a supervised practice (a total of 3 credits), for a total of 33 credits for the degree.

## Advanced Certificate

Students who are not pursuing an M.A. and who either hold teacher certification in another area or are simultaneously pursuing teacher certification in another area can choose the 15 -credit Advanced Certificate. The course of study includes the foundation courses and 3 points from the following courses:

- A\&HB 4121 Bilingual/bicultural curriculum design in elementary and middle schools
- A\&HB 4133 Curriculum and methods for bilingual teachers: Science
- A\&HB 4134 Curriculum and methods for bilingual teachers: Mathematics
- A\&HB 4028 Teaching literacy in bilingual settings
- A\&HB 4720 Student teaching in bilingual/bicultural education


## COURSES:

## A\&HB 4020. Bilingualism and disabilities

 (1-3)Faculty. This course examines the interaction between disability and bilingualism through the lifespan and across home, school, work, and other life contexts. It draws on theories and practices from linguistics, bilingual education, the literatures of disability rights, and the teaching of students with disabilities.

A\&HB 4021. Foundations of bilingual/ bicultural education (3)
Faculty. Offered in the fall. Review of the linguistic, socio-cultural, philosophical, political, and historical foundations that have shaped bilingual education policies, program models, and teaching and assessment practices. Analysis of how diverse bilingual education program models throughout the world respond to different linguistic, social, and educational goals.

A\&HB 4024. Linguistic foundations of bilingual/bicultural education (3)
Faculty. Offered in the spring. Introduction to the study of bilingualism. Study of sociolinguistics and psycholinguistics as applied to the design and implementation of bilingual/bicultural educational models and materials.

A\&HB 4028. Teaching literacy in bilingual settings (3)
Faculty. Offered in the spring. Prerequisite: ITSF 4021. Approaches to developing literacy in a second and native language in elementary and middle schools. Techniques for developing listening, speaking, reading and writing, developing language and literacy through the content areas, using children's literature, and assessing students' literacy development in the second and native language. Strategies to develop biliteracy in dual language programs.

A\&HB 4075. Cross-cultural communication and classroom ecology (3)
Faculty. Offered in the fall. Examination of the influence of culture in the design and implementation of school instruction. Identification of salient theoretical issues related to culture and social organization as they relate to the education of ethnolinguistic and minoritized children. Exploration of the learning/teaching processes within the context of multicultural and bilingual classroom settings from a cultural perspective. Reflection upon the role of the teacher in creating cultural learning environments. Survey of research approaches which serve as tools to examine classroom interaction.

A\&HB 4121. Bilingual/bicultural curriculum design in elementary and middle schools (3) Faculty. Offered in the spring. Corequisites: ITSF 4133 and ITSF 4134. Permission required. Prerequisites: ITSF 4021 and proficiency in the English language and one additional language. The course focuses on: (a) linguistic, cognitive, developmental, and socio-cultural considerations in the design of bi/multilingual curricula; (b) exploration of bi/multilingual instructional methods and materials for use in language arts and content areas; (c) critique of current commercially prepared products.

A\&HB 4133-A\&HB 4135. Curriculum and methods for bilingual teachers (1-3) Faculty. Offered spring. Corequisite: ITSF 4121. Prerequisites: ITSF 4021, or permission of instructor. Intensive review of curriculum and methods appropriate to the teaching of the subject areas in bilingual instructional settings.

Offered as needed for those wishing to obtain bilingual teacher certification.

- A\&HB 4133. Science
- A\&HB 4134. Mathematics
- A\&HB 4135. Language arts

A\&HB 4150. Teacher/educational inquiry: Bilingual/bicultural education (1-3)
Professor Torres-Guzman. Permission required. Open only to students registered in any of the M.A. Programs in Bilingual/Bicultural Education. Reflective inquiry focused on bilingualism or biculturalism in relation to instruction in the native language, native language development, second language learning, and the relationship between the theory and practice of learning and/or teaching in bi/multilingual/multicultural settings. Course supports students in development and presentation of their Integrative Project. Offered only in the fall.

A\&HB 4323. Practicum/student teaching for practicing teachers in bilingual/bicultural education (3-4)
Faculty. Offered every fall. Permission required. This course is for current teachers or students with prior teaching experience. Practical application of bilingual and bicultural classroom practices in all content areas, the teaching of an additional language (ESL or LOTE), and the development of bilingualism. Classroom observations and supervision will be provided for full-time teachers and student teachers. Weekly seminars focus on teaching strategies for a variety of bilingual settings, including teaching content and developing language.

A\&HB 4325. Practicum/Internship in bilingual/bicultural institutions (3) Faculty. Offered every fall. Develop practical skills in teaching an additional language other than English and developing cross cultural understandings through working weekly with a small group of students in a non-formal school setting. Seminars focus on methods and strategies for integration of language and cultural awareness taught in hands-on ways. Fluency in a language other than English required.

A\&HB 4720. Student teaching in bilingual/bicultural education (4)
Faculty. Offered every spring. Permission required. Student teaching in bilingual elementary classroom. Practical application of bilingual and bicultural classroom practices in all content areas, the teaching of an additional language (ESL or LOTE), and the development of bilingualism. Classroom observations and supervision will be provided for full-time teachers and student teachers. Weekly seminars focus on teaching strategies for a variety of bilingual settings, including teaching content and developing language.

A\&HB 5021. Assessment and evaluation in bilingual education (3)
Faculty. Permission required. Prerequisite:

Introductory course in educational or psychological assessment. Survey of tools and techniques used in different types of assessment and evaluation including linguistic, psychoeducational, and programmatic areas; principles, limitations, and alternatives applied to the above as they pertain to effective bilingual programs. Emphasis on methods of assessment and evaluation that can be used by the teacher/supervisor with English Language Learners.

A\&HB 5022. Administration of bilingual programs (3)
Faculty. Focus on managerial, legal, and financial issues in bilingual education, with particular emphasis on urban and suburban settings at elementary and secondary school levels.

## A\&HB 5024. Bilingual/multilingual

 education: International perspectives (3) Professor Torres-Guzman. A survey of bilingual/multilingual educational policies and practices throughout the world. While such models and designs are analyzed from a comparative educational perspective, much attention is given to the ethnolinguistic, social, economic, and political contexts.
## A\&HB 5123. School counseling of bilin-

 gual/bicultural children, adolescents and their families (3)Faculty. Guidance and counseling theory, research and practice regarding bilingual and racially/culturally diverse children, adolescents and their families. The course examines paradigms used to understand the behavior of bilingual/bicultural children, the impact of various factors on their functioning, models for assessing their functioning, and preventive and rehabilitative interventions to effect change.

A\&HB 5513. Staff development in multilingual/multicultural settings (3)
Faculty. Permission required. Critical study of theory and practice of staff development in multilingual/multicultural settings.

## A\&HB 6202. Advanced fieldwork

(1-6 each course)
Faculty. Permission required.

## A\&HB 6402. Internship in

## bilingual/bicultural education (1-6)

Faculty. Permission required. Occasional opportunities in areas represented by the department. Students must inquire to see if opportunities are available during any given semester.

## A\&HB 6521. Seminar in bilingualism/bilingual education (3)

 Professor Torres-Guzman. A review of research in bilingual/bicultural education from an inter-disciplinary perspective. The focus is on the analysis of research, evaluation methodologies and findings, and their potential application to current theory and practice.
# Arts and Humanities 

## Courses Open to Non-Majors

A number of departmental offerings are suitable for non-majors because of their non-technical nature. Consult advisors about other courses not listed.

- A\&HB 4021. Foundations of bilingual/bicultural education (3)
- A\&HB 4024. Linguistic foundations of bilingual/bicultural education (3)
- A\&HB 4075. Cross-cultural communication and classroom ecology (3)
- A\&HB 5123. School counseling of bilingual/bicultural children (3)
- A\&HB 5024. Bilingual/multilingual education: International perspectives (3)



## HISTORY AND EDUCATION

Program Coordinator:
Bette Weneck
Program Office: $\quad$ (212) 678-4138
Email: $\quad$ bcw5@columbia.edu
Website: www.tc.edu/a\&h/HistoryEd

## Degrees Offered:

HISTORY AND EDUCATION (HIST)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## Program Description:

The Program in History and Education is one of the oldest at Teachers College, the history of education having been one of the first components of the university study of education. Many of the earliest doctoral dissertations at Teachers College dealt with historical subjects, even in the case of students aspiring to careers in curriculum, guidance, and administration.

The program prepares people to teach in graduate schools of education, undergraduate departments of education, departments of history, theological seminaries, or other academic institutions, and to work as research scholars in institutes, government bureaus, or social service agencies where a deep understanding of education in historical perspective is essential.

The program addresses important educational questions, first, by examining the ideas, individuals, and institutions of the past to determine their influence on their own times; and, second, by bringing historical knowledge and perspective to bear on current educational issues. The program offers courses covering the educational history of America, urban areas, women, immigrants, and African-Americans.

The program is open to students of broad and diverse backgrounds who can give evidence of academic competence and personal qualities suggesting high probability of professional success. Each student in the program is expected to take courses in the history of education, as well as in the more generalized fields of social, political, and cultural history. Students can also take subject matter courses in cognate areas aimed at complementing and supporting their specialized areas of interest within the history of education. In addition, most students engage in continuous independent research under the supervision of a faculty member.

Students in the program are encouraged, with their advisor's guidance, to make full use of resources offered by other programs at Teachers College, Columbia University, the Jewish Theological Seminary, and Union Theological Seminary.

Note: If you are interested in becoming a certified public school teacher, please see the program in Teaching of Social Studies in this department. The program in History and Education does not lead to public school certification.

## Special Application <br> Requirements/Information:

A sample of historical writing is required for Ed.M., Ed.D., and Ph.D. applicants. Master's students may begin in the fall or spring only. Doctoral applicants are accepted for the fall term only. GRE is required.

## Degree Requirements:

All courses should be determined with the advice and approval of the student's advisor.

## Master of Arts (30 or 32 points)

The Master of Arts offers two approaches: 1) 30 points and a formal master's essay, or 2) 32 points and a special project. Topics and preparation of the essay or the special project are to be determined in consultation with the student's advisor. At least 15 of the points taken for the degree must be in the field of history and education. At least three Teachers College courses (for at least 2 points each) must be taken outside of the program in History and Education.

## Master of Education (60 points)

The Master of Education requires 60 points, at least 30 of which must be completed under the auspices of Teachers College. Students must take at least 30 points in history and education and at least three Teachers College courses (for at least 2 points each) outside the program.

## Doctor of Education (90 points)

The Doctor of Education requires 90 points with emphasis on broad preparation for a variety of teaching, research and administrative responsibilities informed by an understanding of historical development and context. Candidates should be in touch with the Office of Doctoral Studies to be certain of complying with the latest procedures, deadlines, and documents.

## Doctor of Philosophy (75 points)

The Doctor of Philosophy requires 75 points, including demonstrated proficiency in two foreign languages. Program emphasis on historical research in education. Candidates should be in touch with the Office of Doctoral Studies to be certain of complying with the latest procedures, deadlines, and documents.

COURSES: $(*=$ course open to non-majors $)$

## Introductory

*A\&HH 4070. History of education in the United States (3) Dr. Erickson. The development of American education in the context of American social and intellectual history.
*A\&HH 4074. Historical visions of teachers and teaching (3)
Professor Waite. A critical examination of popular representations of teachers during the 20th century.
*A\&HH 4076. History of urban education (3) Dr. Weneck. Examines educational activities within urban communities including schooling and the educational activities of social, political, and cultural groups from the eighteenth century to the present.

## Intermediate

*A\&HH 5065. History of collegiate women/careers (3)
Faculty. This course will focus on collegiate women and careers in U.S. history beginning with women's access to higher education after the Civil War.
*A\&HH 5070. History and theory of higher education (3)
Faculty. Fundamental ideas that have shaped liberal education in the United States and basic issues that arise in the formulation of purposes, policies, and educational programs in colleges and universities.
*A\&HH 5072. Student activism and student movements in historical perspective (3) Faculty. A critical examination of the changes and continuities in student life from the Colonial Era to the present, with special emphasis on the causes and consequences of protests and movements.
*A\&HH 5076. History of African-American education (3)
Professor Waite. An exploration of informal and formal education from slavery to the present.
*A\&HH 6041. Historical method (3)
Dr. Weneck. Permission of instructor required. Methods, principles, and problems of historical research and interpretation. Designed for students throughout the College undertaking systematic inquiries on historical topics.

A\&HH 6574-A\&HH 6575. Seminar in the history of American education (3) Faculty. Permission of instructor required.
*A\&HH 6577. Topics in the history of American educational thought (3) Professor McClintock. Permission of instructor required. Prerequisite: A\&HH 4070 or equivalent. Considers the origins of American education including international perspectives.

## Advanced

A\&HH 5670. Colloquium in history and education (1-3)
Professor Waite. For majors only. Discussion of research and teaching topics in history and education, presentation of dissertation proposals and drafts, and explorations of the employment prospects of specialists in history and education.

A\&HH 6574-A\&HH 6575. Seminar in the history of American education (3) Faculty. Permission of instructor required.

## Individualized Studies

A\&HH 4901. Research and independent study (1-8)
Faculty. Permission of instructor required.
A\&HH 6901. Research and independent study (1-8)
Faculty. Permission of instructor required.

## A\&HH 6970. Studies in history

 and education (1-6)Faculty. Advanced students may register for intensive individual study of some aspect of their specialization. Registration is only by permission of the professor under whose guidance the work will be undertaken. Times for individual conferences will be arranged. Enrollment may be for 1 or more points each term, and registration is not limited to one or two terms.

A\&HH 7501. Dissertation seminar in history and education (0-3)
Faculty. Permission of instructor required. Required of doctoral students in the semester following successful completion of certification examinations.

A\&HH 8901. Dissertation advisement in history and education (0)
Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

## MUSIC AND MUSIC EDUCATION

Program Coordinator:
Dwight Manning
Program Office: (212) 678-3285
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Website: www.tc.edu/a\&h/MusicEd

## Degrees Offered:

MUSIC AND MUSIC EDUCATION (MUSC)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Education in the College
Teaching of Music (Ed.D.C.T.)
MUSIC AND MUSIC EDUCATION
InITIAL CERTIFICATION (MUSC-INIT)
Master of Arts (M.A.)
Master of Education (Ed.M.)
MUSIC AND MUSIC EDUCATION
PROFESSIONAL CERTIFICATION (MUSC-PROF)
Master of Arts (M.A.)

## Program Description:

The Program in Music and Music Education embraces humanistic values as they relate to contemporary musical and educational life while respecting the musical traditions of the past. The faculty in Music and Music Education recognize the importance and uniqueness of the arts in our society and strive to offer flexible and individualized programs for the preparation of musician-educators. Faculty members are seasoned practitioners, who reflect a wide range of expertise in comprehensive musicianship, early childhood music, instrumental and jazz pedagogy, vocal and choral performance, assessment, improvisation, jazz, technology, and the full spectrum of public and private school music through graduate school and research practices.

The degree programs in Music and Music Education are each built around a core of courses considered central to exemplary music education. Beyond the core, students have flexibility to plan with their advisor individual programs designed to meet particular needs and goals.

In addition to courses in music and music education, students are expected to select courses from other offerings of Teachers College and Columbia University in order to fulfill degree requirements.

## Arts and Humanities

Students in the degree programs can prepare for the following positions:

- teacher of music in early childhood settings, elementary and secondary schools;
- teacher and administrator of music in colleges and universities;
- teacher of music in private school and studios;
- researcher and teacher-educator of music in institutions of higher learning; and
- teacher, curriculum specialist, and teachereducator in interdisciplinary areas of arts and humanities, music, and special education, new technology in music education, and adult education.

Within the four degrees offered, there are nine programs of study for Music and Music Education.

1) M.A.
a) M.A. (general)
b) M.A. with PreK-12 Initial New York State Certification
c) M.A. with NYS Professional Certification
d) M.A. with NYS Professional Certification Summer (INSTEP)
2) Ed.M.
a) Ed.M. (general)
b) Ed.M. with Initial New York State Certification
3) Ed.D.
4) Ed.D.C.T.
a) Ed.D.C.T. (general)
b) Ed.D.C.T. Cohort
5) $M . A$.
a) The traditional M.A. program is a postbachelor's degree program that provides graduate studies with a balance of work in performance, comprehensive musicianship, pedagogy, and research. The degree program is designed to allow flexibility in course selection, so that each student may prepare for his or her professional career in music education.
b) M.A. with PreK-12 Initial Certification The M.A. degree with Teacher Certification is a program designed for students with an undergraduate degree in music who wish to prepare for teaching music in the public schools. The 40-point degree program leads to both the M.A. degree and New York State Teacher of Music, PreK-12 Certification. All requirements for certification can be completed in this M.A. program if the candidate is identified at the first registration. Students in this M.A. program take coursework followed by two semesters of carefully guided student teaching in schools that reflect the Music Program's philosophy of authentic and relevant musical pedagogy.
c) M.A. with Professional Certification The M.A. Professional Certification Program is designed for music educators,
(a) certified to teach in other states, or (b) who hold New York State Initial certification to meet the New York State requirements for the Professional Certification in Music Education. For professionals teaching in other states, the program provides advanced professional experiences built upon previous professional work. The Program requires graduate studies with work in pedagogy, research, comprehensive musicianship and performance. The degree program is designed to allow some flexibility in course selection, so that each student may build upon his or her previous academic work and teaching experience, as well as prepare for his or her professional career in music education.

## d) M.A. Summer INSTEP

The INSTEP program is a summer program that focuses on the needs of beginning teachers by offering them the opportunity to acquire their Master's degree by enrolling primarily in the summer. The program is guided by pedagogical and philosophical underpinnings that reflect current trends in rethinking and reconceiving the teaching of Music. This M.A. program meets the recently conceived state and national teacher preparation standards.
2) Ed.M.
a) The Master of Education degree (Ed.M.) in Music and Music Education is an advanced professional degree for practitioners in music education that is designed to prepare graduates for a career in elementary schools, secondary schools, and colleges. It is awarded upon satisfactory completion of 60 points of graduate study. Major emphasis is placed on the improvement of instruction and curriculum.
b) Ed.M. with Initial New York State Certification
The Ed.M. degree with Initial Teacher Certification is a program designed for students with a master's degree in music who wish to prepare for teaching music in the public schools. The 60 -point degree program leads to both the Ed.M. degree and New York State Teacher of Music, PreK12 Initial Certification. All requirements for certification can be completed in the Ed.M. program if the candidate is identified at the first registration. Students in this Ed.M. program take coursework followed by two semesters of carefully guided student teaching in schools that reflect the Music Program's philosophy of authentic and relevant musical pedagogy.
3) Ed.D.

The Doctor of Education offers preparation for professional careers in a variety of settings. The Ed.D prepares students for positions in the teaching and supervision of music in elementary and secondary
schools, the teaching and administration of music in early childhood settings, the teaching of music in private schools and private studios, the teaching and administration of music in colleges and universities, and careers in music and interdisciplinary areas, such as the arts and humanities, and special and adult education.

## 4) Ed.D.C.T.

a) Ed.D. in College Teaching offers preparation for professional careers in a variety of settings. The Ed.D.C.T. is designed primarily for students with a high level of performance skills whose goal or present position is focused on the teaching of performance in higher education.
b) Ed.D.C.T. Cohort

The Doctoral Cohort Program is a unique offering designed for music faculty members holding full-time academic appointments who are interested in completing a doctoral program.

## Special Application Requirements/Information:

Masters Programs (M.A., M.A. with PreK-12 certification, M.A. with professional certification, Ed.M.)

## Please visit the Admissions website for information

 concerning the application process.Applicants for Masters Programs must have an undergraduate degree with a major in music or music education, or an undergraduate degree with evidence of sufficient musical training and experience to qualify the student for graduate work in this field. The complete application will include:

1. Completed Application Form
2. Application Fee
3. Personal Statement
4. Official Transcript(s)
5. Letters of Reference
6. Resume

## The GRE is not required.

Applicants are responsible for collecting and submitting all necessary application materials by the designated program deadline (available on the Office of Admission website). Online applicants may have letters of reference submitted electronically. All applicants must collect and submit supporting documentation, such as transcripts and test scores (i.e., TOEFL), directly to the Teachers College Office of Admission.

## Doctoral Programs (Ed.D. and Ed.D.C.T.)

Please visit the Admissions website for information concerning the application process.

Applicants for the Ed.D. normally have previously received a Master of Arts or Master of Music degree. Applicants for the Ed.D. and the Ed.D.C.T. are expected to have several years of professional experience as an educator or performing musician prior to beginning the doctoral program. Both doctoral programs are very selective and admit only a few students each year. The complete application will include:

1. Completed Application Form
2. Application Fee
3. Personal Statement
4. Official Transcript(s)
5. Letters of Reference
6. Resume
7. Writing Sample
8. Audition (Ed.D.C.T. only)

## The GRE is not required.

Personal Statement
As part of the application process, for your personal statement, please thoughtfully consider the questions below and write a $750-1000$ word response.

1. What are your professional career goals? How do you envision your future?
Where do you expect to be in five or ten years?
What do you expect to be doing?
2. What are your plans for completion of the degree?
How do you anticipate your enrollment status?
How long do you expect it will take?
How many credits do you anticipate
taking each semester?
3. What are your scholarly interests?

Writing Sample
Academic paper or scholarly article.
Audition
Applicants for the Ed.D.C.T. must submit a recent recording (CD/DVD) of a performance or arrange for an audition through the music program office.

Applications for the Ed.D. and the Ed.D.C.T. are reviewed once each year for fall admission.

Applicants are responsible for collecting and submitting all necessary application materials by the designated program deadline (visit the Office of Admission website for details).

Online applicants may have their letters of reference submitted electronically. All applicants must collect and submit all supporting documentation, including transcripts and test scores (i.e., TOEFL), directly to the Teachers College Office of Admission.

## Degree Requirements:

## MASTER OF Arts (32 points)

A minimum of 32 points is required. Some programs may exceed the minimum number due to professional goals, special interests, or deficiencies in undergraduate work. No more than 12 points of graduate credit from other faculties of the University may be applied to the minimum point requirement, and no transfer points will be accepted from other institutions.

A student enrolled in the 32-point master's degree is expected to plan a program of study with an advisor that reflects a balance of work in each of four areas of music study, based upon the training, experience and specific needs of the student. The four areas of music study are: (1) Pedagogy, (2) Research, (3) Comprehensive Musicianship, and (4) Music Performance.

In order to broaden the student's background, in addition to the coursework in music, three Teachers College courses (a course is defined as one for which at least 2 points are earned) outside of the Program (A\&HM) are required.

Specifically, students are expected to enroll in:
(1) At least two courses from the Music Pedagogy Courses, selected from the following:

- A\&HM 4021 Designing musical experiences for young children
- A\&HM 5020 Foundations of music education
- A\&HM 5025 Creativity and problem solving in music education
- A\&HM 5026 Music skills and the creative strategy
(2) At least one course from the Research Area (A\&HM 5022, A\&HM 5023, A\&H 5001, A\&H 5002 may be used to fulfill this requirement)
(3) At least one course from the Comprehensive Musicianship Area
(4) At least two courses from the Music Performance Area
(5) The remaining courses in music can be selected from any of the four areas, in consultation with an advisor.

In order to graduate, a student must complete the necessary coursework, compile and present a portfolio, and demonstrate competent musicianship in performance as approved by the program faculty.

## Master of Arts leading toward PreK-12 Initial New York State Certification (40 points)

The M.A. degree leading toward Initial New York State Teacher Certification is a program designed for students with an undergraduate degree in music who wish to prepare for teaching music in the public schools. The 40 -point degree program leads to both the M.A. degree and New York State Teacher of Music certification, PreK-12.

Teachers College courses required to fulfill state certification requirements (19 points):

- A\&HM 4021 Designing musical experiences for young children
- A\&HM 4029 Introduction to new technologies in music education
- A\&HM 5020 Foundations of music education
- A\&HM 5022 Children's musical development
- A\&HM 5025 Creativity and problemsolving in music education
- A\&HM 5026 Music skills and the creative strategy
- Special Education course in consultation with advisor


## Elective music pedagogy courses

(4-6 points): Consult a faculty advisor.

## Required music content courses

(5-7 points):

- Applied music (2-4)
- A\&HM 5032 Comprehensive or 5033 musicianship I or II (3)


## Required fieldwork courses <br> (6 points): <br> - A\&HM 4701 <br> Supervised teaching in music education <br> - A\&HM 4711 Supervised teaching in music education: 7-12

Note: To be certified by New York State, there are additional requirements. Please see the Teacher Education section of this bulletin for details.

## Required out-of-program courses:

Two TC courses (in addition to the course in Special Education) each for a minimum of 2 points, selected from outside the program in Music and Music Education (A\&HM).

In order to graduate, students must complete the necessary coursework, complete student teaching, the summative project, and demonstrate competent musicianship in performance.

## ARTS AND Humanities

## Master of Arts Professional Certification Program (32 Points)

This Master of Arts Program is designed for music educators: (a) certified to teach in other states, or (b) holding New York State Initial certificates to meet the New York State requirements for Professional Certification in Music Education. For professionals teaching in other states, the program provides advanced professional experiences built upon previous professional work. The program requires graduate studies with work in pedagogy, research, comprehensive musicianship, and performance. The degree program is designed to allow some flexibility in course selection, so that each student may build upon his or her previous academic work and teaching experience, as well as prepare for his or her professional career in music education.

INSTEP: A three-year, summer Master of Arts program that may lead to a New York State Professional Certification. Contact Professor Harold Abeles for details (abeles@tc.edu).

## I. Admission

Admission requires that students must hold initial state teaching certification in music.

## II. Program of Study

A minimum of 32 points is required. Some students' coursework may exceed the minimum number due to professional goals or special interests. No more than 12 points of graduate credit from other faculties of Columbia University may be applied to the minimum point requirement, and no graduate credits will be accepted from other institutions.

A student enrolled in the 32 -point master's degree is expected to plan a program of study with an advisor that reflects work in each of four areas of music study, based upon the training, experience and specific needs of the student. The four areas of music study are: (1) Pedagogy, (2) Research,
(3) Comprehensive Musicianship, and
(4) Music Performance.

Specifically, students are expected to enroll in:
(a) At least one course from the following (3 points):

- A\&HM 5020 Foundations of music education
- A\&HM 5027 Philosophy of music education
(b) At least one course from the
following (3 points):
- A\&HM 4021 Designing musical experiences for young children
- A\&HM 5025 Creativity and problemsolving in music education
(c) At least one course from the Research area, to be selected from the following ( $2-3$ points):
- A\&H 5001 Research methods in
arts education
- A\&H 5002 Assessment strategies for the arts
- A\&HM 5022 Children's musical development
- A\&HM 5023 Vocal pedagogy
(d) At least one course from the Comprehensive Musicianship area, to be selected from the following (3 points):
- A\&HM 5032 Comprehensive musicianship I
- A\&HM 5033 Comprehensive musicianship II
(e) Two or three courses from the following (a minimum of 6 points):
- A\&H 4008 Creative arts laboratory
- A\&HM 4029 Introduction to new technologies in music education
- A\&HM 4050 Conducting and score reading
- A\&HM 5026 Music skills and the creative strategy
- A\&HM 5021 Instrumental instruction for children
- A\&HM 5042 Choral literature survey
- A\&HM 5047 Creative strategies for teaching music literature
- A\&HM 5050 Advanced conducting and interpretation
- A\&HM 5052 Vocal literature and interpretation
- A\&HM 4059 Jazz Improvisation I
- A\&HM 4060 Jazz Improvisation II
(f) At least one course from the Music Performance area (2 points)


## (g) Completion of at least three

 Teachers College courses, for a minimum of 2 points each, at Teachers College outside of the Music Program. (6-9 points)In order to broaden the student's background (in addition to the coursework in music), three Teachers College courses outside of the program (A\&HM) are required. Only one of these three courses may be in A\&HA (Visual Arts) or A\&HG (Arts Administration). These should be selected in consultation with a faculty advisor.
(h) The remaining courses can be selected from any of the four areas in music or from outside of music, in consultation with a faculty advisor. (6-12 points)
(i) Submit a portfolio to the Music Program Secretary by week 10 of the
semester in which you plan to graduate. A list of portfolio requirements is available in the Music Office.

## Master of Education (60 points)

The general course requirement is a minimum of 60 graduate semester hours, 30 points of which must be completed under the auspices of Columbia University, with at least 18 points in Teachers College coursework. Candidates who have earned a Master of Arts degree from Teachers College must complete at least 45 of the 60 graduate points at Teachers College.

Programs of study and courses for the degree are divided into four general areas: (1) Pedagogy, (2) Research, (3) Comprehensive Musicianship, and (4) Music Performance. A program of study should reflect a balance of courses in these areas.

In addition to the music program courses, each candidate is expected to complete four courses of at least 2 points each from outside the program in Music Education. These electives are to be selected from areas deemed appropriate in consultation with the faculty advisor. Candidates for the Ed.M. degree must complete a scholarly paper demonstrating their ability to synthesize research. The paper is usually completed in A\&HM 5031,
Synthesizing Research in Music Education, an online 3 point course.

## Doctor of Education and Doctor of Education in The College Teaching of an Academic Subject (90 POINTS) <br> Requirements include:

1) Satisfactory completion of a program of 90 graduate points beyond the baccalaureate degree,
2) Successful performance on a departmental certification examination, and
3) Preparation and defense of a dissertation.

At least 54 points of work must be completed at Teachers College. A maximum of 36 graduate points may be accepted from other recognized graduate schools. Transfer credits are evaluated and allocated by the Admissions Office for consideration by the Music Program. Final determinations are made by the program faculty.

Doctoral students must complete a minimum of 15 points of coursework in areas other than those in the Music Program. For the Ed.D. in College Teaching program, two of these courses must be in the area of higher education.

To ensure breadth in professional background, coursework should result in competency in the following four broad areas: (1) Pedagogy, (2) Research, (3) Comprehensive Musicianship, and (4) Music Performance. Refer to the catalog for course listings under these general headings.

The preparation and the defense of a dissertation is required for the doctoral degree. When writing the dissertation, each candidate has a sponsor and an additional committee member. Most often the sponsor is a faculty member of the Program in Music and Music Education. Committee members may be chosen from among the professorial faculty elsewhere at Teachers College or the University. Topics are selected from a variety of areas to meet professional needs and interests. Students should consult the appropriate bulletins of the Office of Doctoral Studies and Doctoral Handbook on the Music Education program website: www.tc.columbia.edu/a\&h/MusicEd for more specific information.

COURSES: ( ${ }^{*}=$ course open to non-majors)

## Pedagogy

*A\&HM 4020. Music for children (2 or 3) Faculty. Focuses on the development of student's musical thinking through active participation in classroom strategies. A broad multicultural repertoire serves to stimulate children's creative musical responses through movement, and exploration of sound and imagery. Includes integrated creative activities involving the combination of movement, vocal and instrumental performance, and listening. Materials fee: $\$ 30$.
*A\&HM 4021. Designing musical experiences for young children (2 or 3) Professor Custodero. Permission of instructor required. Prerequisite: A\&HM 5022. Overview of appropriate interactive practices, environmental design, and curriculum planning for young children from birth through age 7 . Includes observations of exemplary teaching as well as practicum experience. Special fee: $\$ 40$.
*A\&HM 4022. The artistic lives of young children (2)
Professor Custodero. For preservice and inservice teachers of young children interested in integrative pedagogy focused on children's engagement with music, art, movement, and dramatic play. Creative expression is explored within cultural, expressive, developmental, and curricular contexts through personal reflection, observation, and instructional design. Materials fee: $\$ 50$.

A\&HM 4023. Choral methods, procedures and materials (3)
Dr. Goffi-Fynn. Recommended for vocalchoral majors. A study of the choir as a performing medium. Rehearsal techniques and
procedures as they apply to the development of artistic choral performance. Choral literature available for school, community, and church groups at all levels of proficiency. Materials fee: \$75.

## A\&HM 4029. Introduction to new

 technologies in music education (2-3) Faculty. Understanding the principles of creating and teaching with synthesizers, MIDI, computers, emphasizing the application to music education. Materials fee: $\$ 75$.*A\&HM 4030. Integrating music in the classroom (2-3)
Professor Pogonowski. Primarily for nonmajors. Focuses on music and its relationship to other curriculum areas as a means to facilitate students' abilities to make connections and conceptualize points of view from a variety of perspectives. Materials fee: $\$ 30$.

A\&HM 4701. Supervised teaching in music education (3)
Professor Allsup. Permission of instructor required. M.A. candidates who are student teaching must complete a minimum of 36 points. A variety of supervised teaching experiences ( $\mathrm{K}-12$ ), supplemented by conferences, evaluation, and seminars. The student completes 200 hours in schools observing, assisting, teaching, and evaluating. Required of those seeking state certification in music in New York State and other states.

A\&HM 4711. Supervised teaching in music education: 7-12 (3)
Faculty.
A\&HM 5020. Foundations of music education (3)
Faculty. An examination of the historical, philosophical, psychological, and sociological bases of music education, emphasizing the implications for the development of curriculum, policy, and administrative leadership.

A\&HM 5021. Instrumental instruction for children (3)
Professor Custodero. Prerequisite: A\&HM 5022. For private and group music teachers. Developmentally appropriate strategies and materials for instrumental instruction, integrating improvisation, composition, movement, singing, and ensemble playing. Special fee: $\$ 30$.

A\&HM 5025. Creativity and problemsolving in music education (Noncredit or 3) Professors Allsup and Pogonowski. Permission of instructor required. Designed for initial and professional majors to experience and explore critical thinking as a means for establishing a framework for music learning at all levels. Materials fee: $\$ 35$.

A\&HM 5026. Music skills and the creative strategy (2-3)
Professors Allsup and Pogonowski. Permission of instructor required. Enrollment limited to 25. Prerequisite: A\&HM 5025. Designed for
initial and professional majors to examine and experience problem-solving techniques for developing musical skills within the framework of the creative strategy. Materials fee: $\$ 35$.

## A\&HM 5027. Philosophical perspectives

 on music education (3)Professor Allsup. An investigation of the influential philosophical texts that inform music teaching and learning. Topics involve the examination of aesthetic and praxial philosophies; ethical practices; and historical, critical, and cultural perspectives.

A\&HM 5029. Intermediate and advanced applications of new technologies in music education (2-3)
Faculty. Specific demonstrations with new music technology emphasizing the development of creative strategies for music education at various levels. Special fee: $\$ 75$.

A\&HM 5047. Creative strategies for teaching music literature (3)
Professor Pogonowski. Selected works from the repertoire serve as the basis for demonstrating how to develop creative music strategies for teaching and enhancing the learning of music literature at all levels, including college teaching. Materials fee: $\$ 30$.

## A\&HM 5141-A\&HM 5143.

## Special topics in music

Faculty. Selected topics of interest in music examined in depth. Topic announced each semester.

- A\&HM 5141. Research
(Noncredit or 1-4)
- A\&HM 5142. Pedagogy
(Noncredit or 1-4)
- A\&HM 5143. Comprehensive musicianship (Noncredit or 1-4)
A\&HM 6001. Teaching and administration of music in college (3)
Professor Abeles. Major issues relating to the curriculum, instruction and administration of programs of music and music education in colleges and universities.


## A\&HM 6023. The teaching of applied

 music in college (2-3)Dr. Goffi-Fynn. Music majors only. Theory and practice of applied music instruction in college for both major and non-major students. Emphasis on developing a studentcentered learning environment. Required for music students who wish to be Graduate Assistants in the Applied Music Program.

## Research

A\&H 5001. Research methods in arts education (3)
Please see description in the departmental course listing at the beginning of this section.

# ARTS AND Humanities 

A\&H 5002. Assessment strategies for the arts (Noncredit or 3)
Please see description in the departmental course listing at the beginning of this section.

A\&HM 5003. Introduction to the perception and cognition of music performance (3) Professor Abeles. An examination of acoustic and psychological foundations of music.

A\&HM 5022. Children's musical development (2-3)
Professor Custodero. Permission of instructor required. Overview of significant issues and current research regarding the development of musical skills and understandings in children through early adolescence. Includes observations of children's spontaneous music-making. Special fee: $\$ 30$.

A\&HM 5023. Vocal pedagogy (2-3) Dr. Goffi-Fynn. Permission of instructor required. Investigation and application of recent research in voice production and pedagogy. Directed teaching of voice comprised of student assignments, observed lessons, and lesson evaluation. Diagnosis of vocal condition and the design of lesson plans to effect change and growth will be emphasized. Special fee: $\$ 50$.

A\&HM 5031. Synthesizing research in music education (3)
Professor Abeles. Prerequisite A\&H 5001. Required for Ed.M. and Ed.D. students. This course develops students' ability to analyze research journals and to summarize research in music education. Students write a synthesis of research in an area of music education.

## Music Performance

(The noncredit fee for conducting courses is equal to 2 points at the current tuition rate.)

A\&HM 4050. Conducting and score reading (Noncredit or 2-3)
Faculty. Principles of conducting as a performing medium; emphasis on technique development for effective artistic visual portrayal of music; reading and memorization of scores. Classes videotaped for viewing. Special fee: $\$ 75$.

## A\&HM 4056. Chamber music

(Noncredit or 2)
Dr. Manning. For music majors only. The study and performance of chamber works from the Baroque through contemporary periods. Special fee: $\$ 110$.

## A\&HM 4059-A\&HM 4060.

Jazz improvisation (Noncredit or 2)
Dr. Konowitz. A sequentially developed performance experience focusing on the basic skills and concepts of jazz performance and improvisation for keyboard, instrumental and vocal musicians. Students will learn how to improvise from the beginning, performing and listening to standard jazz and blues repertoire.

A\&HM 5050. Advanced conducting and interpretation (Noncredit or 2-3) Faculty. Prerequisite: A\&HM 4050 or equivalent. For students experienced in conducting. Reading and memorization of scores involving clefs and transpositions. Videotapes made and studied. Special fee: $\$ 75$.
*A\&HM 4150. Music instruction:
Instrumental/voice (Noncredit or 2)
Faculty. Written permission from the Music Education Program, Room 520A Horace Mann, required. Primarily for beginning students. With permission of the advisor, students may register continuously for this course. Special fee: $\$ 110$.

## A\&HM 4357-A\&HM 4358. Ensemble performance: Music

Faculty. For music majors only. For instrumental and vocal majors, a course designed for performance by chamber ensembles. Repertoire determined by registration. Public concert performances each semester.

- A\&HM 4357. Instrumental (Noncredit or 1)
- A\&HM 4358. Vocal ensemble (Noncredit or 1)


## Comprehensive Musicianship

A\&HM 5032. Comprehensive musicianship I (3)
Professor Pogonowski. Through analysis, composition, critical listening, improvisation and performance, 17 th and 18 th century theoretical constructs are explored, including an overview of the development of harmony and polyphony leading up to these eras. Materials fee: $\$ 35$.

A\&HM 5033. Comprehensive musicianship II (3)
Professor Pogonowski. Maximum enrollment: 25. An examination of 19th century theoretical constructs through analysis, composition, critical listening, improvisation, and performance. Materials fee: $\$ 35$.

A\&HM 5040-A\&HM 5041. Interpretation of piano literature (Noncredit or 3) Faculty. Prerequisite: A\&HM 5350 or equivalent. The study and performance of representative piano compositions from the Baroque through contemporary periods, with appropriate harmonic, stylistic, and technical analysis.

A\&HM 5042. Choral literature survey (2-3) Faculty. Recommended for vocal-choral majors. A comprehensive survey of representative choral music, from the early Renaissance period to the present. Examination of the development of choral forms, stylistic features, and performance practice of the periods. Materials fee: $\$ 75$.

A\&HM 5052. Vocal literature and interpretation (Noncredit or 3)
Faculty. For students of singing, accompanying and coaching. Offers performing and teaching command of representative literature, techniques of interpretation and presentation; German, Italian, and French diction for singers. Course may be repeated. Materials fee: $\$ 40$.

## A\&HM 5058-A\&HM 6058. Recital

Faculty. For Music majors only. Corequisite: simultaneous registration for applied music instruction. The student will mount a recital by securing a date, designing programs and flyers, advertising, arranging for personnel, rehearsing, and finally performing. If $\mathrm{s} / \mathrm{he}$ chooses to perform in a group with classmates, then $\mathrm{s} / \mathrm{he}$ should register for 0 points. If the student wishes to give a full, solo recital, then s /he has the option of registering for 1 point to receive additional coaching from the applied music instructor.

- A\&HM 5058. Recital I (0-1) Open only to music education program majors at the M.A. level.
- A\&HM 6058. Recital II (0-1) Open only to music education program majors at either the Ed.M. or Ed.D. levels.


## A\&HM 5150-A\&HM 5172. Instrumental

 music instruction (2)Faculty. Written permission from the Music Education Program, Room 520A Horace Mann, required. For intermediate and advanced Music majors only. With permission of advisor, students may register continuously for the course numbers below. Special fee:
$\$ 110$.

- A\&HM 5150. Violin
- A\&HM 5151. Trumpet
- A\&HM 5152. Harp
- A\&HM 5153. Cello
- A\&HM 5154. Viola
- A\&HM 5155. String bass
- A\&HM 5156. Percussion
- A\&HM 5157. French horn
- A\&HM 5158. Trombone, Baritone
- A\&HM 5159. Tuba
- A\&HM 5160. Oboe
- A\&HM 5161. Saxophone
- A\&HM 5162. Flute
- A\&HM 5163. Clarinet
- A\&HM 5164. Bassoon
- A\&HM 5166. Guitar
- A\&HM 5167. Synthesizer
- A\&HM 5168. Strings
- A\&HM 5169. Woodwinds
- A\&HM 5170. Brass
- A\&HM 5171. Renaissance Instruments
- A\&HM 5172. Viola de Gamba

A\&HM 5350. Piano instruction for music majors (2)
Faculty. Written permission from the Music Education Program, Room 520A Horace Mann, required. Individual instruction includes repertory, technical and musical problems, performing experience, and intensive understanding of teaching strategies. With the permission of the advisor, students may register continuously for this course. Special fee: $\$ 110$.

A\&HM 5351. Harpsichord instruction II (2) Faculty. For Music majors only. Written permission from the Music Education Program, Room 520A Horace Mann, required. Advanced harpsichord instruction: emphasis on elements of style and special techniques of performance of early keyboard music. Discussion of teaching material from beginning to advanced repertory. With permission of the advisor, a student may register continuously for this course. Special fee: $\$ 110$.

A\&HM 5352. Voice instruction for music majors (2)
Faculty. For Music majors only. Written permission from the Music Education Program, Room 520A Horace Mann, required. Advanced individual voice instruction includes repertory, technical, and musical problems, performing experience, and intensive understanding of teaching strategies. With the permission of the advisor, a student may register continuously for this course. Special fee: $\$ 110$.

A\&HM 5353. Organ instruction for music majors (2)
Faculty. Written permission from the Music Education Program, Room 520A Horace Mann, required. For experienced organists and music majors. Individual instruction on technical problems, repertory and performance practice. With the permission of the advisor, a student may register continuously for this course. Special fee: $\$ 110$.

## Fieldwork, Internships and Research/Independent Study

Permission required from advisor and sign-up in the Music Office (520A Horace Mann) is also required.

A\&HM 4201. Fieldwork in music education (1-4)
Faculty. For Music majors only. Professional activities in the field under the supervision of a member of the Music Education Program faculty.

A\&HM 4901. Research and independent study in music education (1-4) Faculty. For Music majors only. Research and independent study under the direction of a member of the Music Education Program faculty.

A\&HM 5201. Fieldwork in music
education (1-4)
Faculty. For Music majors only. Professional activities in the field under the supervision of a member of the Music Education Program faculty.

A\&HM 5901. Research and independent study in music education (1-4)
Faculty. For Music majors only. Research and independent study under the direction of a member of the Music Education Program faculty.

A\&HM 6201. Advanced fieldwork in music education (1-4)
Faculty. For Music majors only. Professional activities in the field under the supervision of a member of the Music Education Program faculty.

A\&HM 6481. Internship in the teaching of college music (3)
Dr. Goffi-Fynn. Guided experiences in the teaching of music in departments of metropo-litan-area colleges.

A\&HM 6501. Doctoral seminar in music education (2-3)
Faculty. Permission required from advisor and sign-up in the Music Office (520A Horace Mann) is also required. For Music majors only. Music doctoral candidates will identify their area of research interest and narrow their dissertation topic.

A\&HM 6901. Advanced study in music education (1-3)
Faculty. For Music majors only, permission required from advisor and sign-up in the Music Office (520A Horace Mann) is also required. Research and independent study under the direction of a member of the Music Education faculty. Different sections will be offered for specific subject areas. Each section will require subject's specific prerequisites.

A\&HM 6971. Research and independent study in music education (1-4) Faculty. Permission required from advisor and sign-up in the Music Office (520A Horace Mann) is also required. Research and independent study under the direction of a faculty member in Music Education.

## A\&HM 7501. Dissertation seminar

 in music education (2-3)Faculty. Permission required from advisor and sign-up in the Music Office (520A Horace Mann) is also required. For Music majors only. A required group tutorial for music doctoral students to help develop or refine topics of inquiry for research. The teaching format is flexible and may include faculty/student presentations, group discussions, and critiques. Preparation and presentation of dissertation proposal for approval. Students may register for a maximum of one term.

A\&HM 8900. Dissertation advisement in music education (0)
Faculty. Permission required from advisor and sign-up in the Music Office (520A Horace Mann) is also required. Individual advisement on doctoral dissertations for music majors only. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D. degree.

See also:
A\&H 5001. Research methods in arts education (3)

A\&H 5002. Assessment strategies for the arts (Noncredit or 3)

A\&HA 4079. Exploring cultural diversity: Implications for art education (Noncredit or 2-3)

A\&HA 5082. Philosophies of art in education (2-3)

A\&HA 5181. The arts in education (2-3)
A\&HA 6021. Supervision and administration: Arts in education (3)

## Arts and Humanities

## PHILOSOPHY AND EDUCATION

Program Coordinator:
Professor David T. Hansen
Program Office: (212) 678-4138
Email: hansen@tc.edu
Website: www.tc.edu/a\&h/Philosophy

## Degrees Offered:

PHILOSOPHY AND EDUCATION (PHIL)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## Program Description:

This program has shaped the historical course of philosophy of education in America. From the groundbreaking work of John Dewey and William Heard Kilpatrick to the achievements of their most recent successors, Jonas Soltis and Maxine Greene, the program's philoso-pher-scholars have been leaders in the field.
The Philosophy and Education Program offers students a unique opportunity to develop their humanistic and critical thinking about education.

Faculty and students in the program devote this thinking to a wide variety of questions, including:

- What visions of the human being animate contemporary schooling?
- How can education be a force for social reform?
- What is the role of aesthetic experience and the imagination in education?
- What type of education befits a multicultural society?
- What is the nature of the teacher-student relationship?

Other areas of interest include:

- The education of democratic citizens
- Moral education
- Critical thinking
- Education and the new technology
- The ethics of teaching

The Philosophy and Education Program provides an opportunity for educators to broaden and deepen their understanding of the processes and aims of education through inquiry into the fields of aesthetics, ethics and moral philosophy, social and political philosophy, and epistemology and the philosophy of science. Study of a variety of historical and conceptual
frameworks enables students to develop theoretical perspectives on education and to effectively analyze and critique arguments in contemporary educational debates.

Recent dissertations have included discussions of the nature of the multicultural self, the role of the liberal arts in teacher education, and communicative ethics as a foundation for literacy education.

## Special Application Requirements/Information:

A background in philosophy is required for Ed.M. and Ed.D. applications. Additionally, an undergraduate major in philosophy is strongly recommended for the Ph.D. application. Applicants to both the Ph.D. and Ed.D. programs must submit GRE scores. A sample of philosophical writing is required for all programs except the M.A. application.

## Degree Requirements:

## Master of Arts (32 points)

The Master of Arts degree program is designed to introduce educators and professionals with a wide variety of interests to the study of philosophy and education. In addition to the required 12 points in Philosophy and Education courses, students may use their electives to develop an area of educational interest (e.g., educational policy, curriculum and teaching, developmental psychology, etc.) and to develop an area of philosophical interest (e.g., ethics, social philosophy, epistemology, etc.).

## Master of Education (60 points)

Similar to the Master of Arts degree program, the Master of Education degree program is designed to provide a more in depth and intensive introduction to the study of philosophy and education. In addition to the required 18 points in Philosophy and Education courses and 3 points required from the Philosophy Department at Columbia University, students may use their electives to develop an area of educational interest (e.g., educational policy, curriculum and teaching, developmental psychology, etc.) and to develop an area of philosophical interest (e.g., ethics, social philosophy, epistemology, etc.).

## Doctor of Education (90 points)

The Ed.D. degree program is flexible and responsive to individual student backgrounds and needs. Each student takes responsibility, in consultation with his or her advisor, for designing a course of study that will meet the program requirements while catering to the individual's interests and professional goals.

At the center of that course of study are the program's research and professional development curriculum and other classes in philosophy and education. In addition to the required 34 points in Philosophy and Education courses, students are also required to do coursework in the following areas: 9 points of philosophy through the Columbia Philosophy Department or inter-university doctoral consortium, foundations of education, and educational breadth. These requirements are modest, leaving room for students to craft a personalized course of study. Additionally, 16 points in the Philosophy and Education requirements are in the program's professional development sequence.

## Doctor of Philosophy ( 75 Points)

The Ph.D. degree program is flexible and responsive to individual student backgrounds and needs. Each student takes responsibility, in consultation with his or her advisor, for designing a course of study that will meet the program requirements while catering to the individual's interests and professional goals.

At the center of that course of study are the program's research and professional development curriculum and other classes in philosophy and education. In addition to the required 36 points in Philosophy and Education courses, students are also required to do coursework in the following areas: 12 points in philosophy, through the Columbia Philosophy Department or inter-university doctoral consortium, foundations of education, and educational breadth. These requirements are modest, leaving room for students to craft a personalized course of study. Additionally, 18 points in the Philosophy and Education requirements are in the program's professional development sequence.

Exact requirements vary for each doctoral program. For example, students in the Ed.D. program will also develop a minor in an educational field such as educational policy, curriculum theory, or comparative education. Candidates should also contact the Office of Doctoral Studies about university and collegewide requirements, procedures, and deadlines for doctoral students. The doctoral programs require students to demonstrate reading proficiency in one of the following languages: French, German, Greek, or Latin. In rare cases, such as for writing the dissertation, another language can be approved in consultation with program faculty.

## COURSES:

(Unless otherwise indicated, courses are open to students from across the college)

## Introductory Service Courses

A\&HF 4090. Philosophies of education (2-3)
Faculty. An introduction to seminal texts, central questions, and rival traditions in philosophy of education. An invitation to develop one's own philosophy of education.

A\&HF 4091. The call to teach (2-3) Faculty. Reading and discussion of philosophical and other works that illuminate what it means to be a teacher, whether of children, youth, or adults. Consideration of motives, rewards, and challenges in teaching.

A\&HF 4092. Education and the aesthetic experience (2-3)
Faculty. An invitation to engage with works of art which challenge conventional ways of thinking and perceiving; consideration of the relation of art, imagination, and education.

A\&HF 4094. School and society (2-3)
Faculty. An examination of historical and contemporary conceptions of the relation between schools and society. Consideration of issues in social and political philosophy that bear on the question of why have schools at all.

## Introductory Program Courses

A\&HF 4190. American philosophies of education (2-3)
Faculty. Major American thinkers and outlooks and their impact on education: Thoreau, Emerson, Fuller, and transcendentalism; Pierce, James, Dewey, and pragmatism; Douglass, Du Bois, and African-American education; Anthony, Stanton, Addams, and feminism.

A\&HF 4194. Dialogue and difference in the multicultural classroom (2-3) Faculty. Philosophical exploration of the pedagogical, psychological, social, and political issues surrounding the recognition and misrecognition of difference. Consideration of theories of dialogue from Plato to Freire.

A\&HF 4196. Identity and ideals: Visions of human flourishing (2-3)
Faculty. An introduction to influential philosophical perspectives on what it means to be a successful, whole, and flourishing human being. Attention to issues of personal identity and personal ideals, and how these can evolve over time.

## Intermediate Service Courses

A\&HF 5090. The philosophy of John Dewey (2-3)
Faculty. For all doctoral students; masters students by permission of instructor. An analysis of the principal works of John Dewey.

A\&HF 5093. Ways of knowing (2-3) Faculty. For all doctoral students; master's students by permission of instructor. Readings in epistemology in the context of teaching, learning, and educational research, from classical and enlightenment sources to feminist, hermeneutic, psychoanalytic, and postmodern critiques. Topics include objectivity and subjectivity, and problems of interpretation in the arts, humanities, and natural and social sciences.

A\&HF 5591. Educational debates in philosophical perspective (1-3)
Faculty. For all doctoral students; master's students by permission of instructor. Topics vary. Convened to promote philosophical discussion of a contemporary educational issue (e.g., patriotism, privatization, standards, technology) or ongoing debate (e.g., liberal education, moral education, teacher education).

## Intermediate and Advanced Program Courses

A\&HF 5190. Critical perspectives in philosophy and education (3)
Faculty. For doctoral students, especially in Philosophy and Education; master's students by permission of instructor. Close reading and discussion of classic and contemporary critical theories. Examination of class, gender, race, and sexuality issues in canon, classroom, and society.

A\&HF 5590. Voices in philosophy and education (2-3)
Faculty. For doctoral students, especially in Philosophy and Education; master's students by permission of instructor. Topics vary. Close reading and discussion of one or more key thinkers in philosophy of education and the history of ideas (e.g., Plato, Kant, Pragmatism, The Frankfurt School, Maxine Greene).

A\&HF 5596. Topics in educational ethics and moral philosophy (2-3)
Faculty. For doctoral students, especially in Philosophy and Education; master's students by permission of instructor. Topics vary but may include any of the following: the moral sources of educational aims, the nature of ideals, the ethics of teaching, moral education, and meta-ethics.

A\&HF 6590. Advanced topics in philosophy and education (1-3)
Faculty. For doctoral students in Philosophy and Education or by permission of instructor. Topics vary and may range from close reading of a single text, to exploration of a key concept or problematic. Past topics include: "Contemporary Theories of Democratic Education"; "The Gadamer-Habermas Debate"; and "Pedagogical Desire from Plato to Freud."

## Research and Professional Development Curriculum

A\&HF 5600. Colloquium in philosophy and education (0-2)
Faculty. For majors only. A series of formal presentations and discussions with scholars in the field of Philosophy and Education. Offered every fall and spring semester. Special fee: $\$ 55$.

## A\&HF 6000. Doctoral proseminar:

 Ancient philosophy and education (4) Faculty. Permission of instructor required. For 1st and 2nd year doctoral students in Philosophy and Education. Close reading and discussion of primary texts in ancient philosophy that have shaped the field of philosophy of education. Complements A\&HF 6100.A\&HF 6100. Doctoral proseminar: Modern philosophy and education (4) Faculty. Permission of instructor required. For 1st and 2nd year doctoral students in Philosophy and Education. Close reading and discussion of primary texts in modern philosophy that have shaped the field of philosophy of education. Complements A\&HF 6000.

A\&HF 6500. Dissertation proposal workshop in philosophy and education ( $0-3$ ) Faculty. Permission of instructor required. Prerequisites: A\&HF 6000 and A\&HF 6100. An ongoing writing workshop required of all doctoral students after completion of the Proseminar sequence and until defense of the proposal. Students develop research interests, hone philosophical skills, and draft dissertation proposals. Offered every fall and spring semester.

## A\&HF 7500. Dissertation seminar in

 philosophy and education (0)Faculty. Permission of instructor required. Required of doctoral students in the semester following successful completion of the doctoral certification process or in the semester in which the student defends the dissertation proposal, whichever comes first.

A\&HF 8900. Dissertation advisement in philosophy and education (0)
Faculty. Permission of instructor required. Individual advisement on doctoral dissertations. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees. Fee to equal 3 points at current tuition rate for each term.

## Individualized Studies

A\&HF 4900. Independent study in philosophy and education (1-4)
Faculty. Permission of instructor required.
A\&HF 6900. Advanced research in philosophy and education (1-6)
Faculty. Permission of instructor required. For doctoral students in Philosophy and Education only.

## ARTS AND Humanities

## TEACHING OF SOCIAL STUDIES

Program Coordinator:<br>Professor William Gaudelli

Program Office: (212) 678-4083
Email: gaudelli@tc.edu
Website: www.tc.edu/a\&h/SocialStudies

## Degrees Offered:

TEACHING OF SOCIAL STUDIES (SSTE)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)
TEACHING OF SOCIAL STUDIES
INITIAL CERTIFICATION (SSTE-INIT)
Master of Arts (M.A.)
TEACHING OF SOCIAL STUDIES
PROFESSIONAL CERTIFICATION (SSTE-PROF)
Master of Arts (M.A.)

## Program Description:

The Social Studies Program combines history and the social sciences for purposes of instruction. The program emphasizes the historical development of the field, selection and organization of subject matter, curriculum and pedagogy for students of diverse backgrounds, and application of digital technology to social studies education in a globally interdependent world.

Social studies educators must be schooled in subject matter, practiced in the arts of teaching, attuned to the needs of students, and alive to the interplay of theory and practice. The program prepares students for professional positions in schools, colleges, universities, and allied institutions. The faculty's strengths in history, civics, and social studies are well suited to that purpose. These strengths, along with the full resources of Teachers College and Columbia University Graduate School of Arts and Sciences are available to every student.

## Special Application <br> Requirements/Information:

Standardized tests are not required for the Social Studies Program. M.A. students typically begin in the fall or summer. Ed.M., Ed.D., and Ph.D. students typically begin in fall term and join a cohort of students.

Applicants should indicate on the specialization section of the application whether they wish to pursue teacher certification.

The Master of Arts (38-point program) provides an avenue for New York State Initial

Certification. The Master of Arts (32-point program including INSTEP) provides an avenue for Professional Certification in New York State and is for experienced teachers and those teaching in private schools.

Applicants to the Master of Arts programs must have taken at least 21 credits in history by the time they complete the M.A. program if they wish to be certified in New York State. Additional coursework is needed in the social sciences (political science, geography, economics, etc.). Those courses that are not listed under a history department, but have substantial history content, may be counted toward the minimum history requirement. All M.A. inquiries should be directed to Mr. Scott Wylie, Social Studies Program Office, Box 80, (212) 678-3173 or ssw2126@columbia.edu.

Applicants to the Master of Education (Ed.M.) degree should be aware that the program generally admits students only after several years of teaching or related professional experience and completion of an M.A. degree in Social Studies education or an appropriate content field. Admission requirements in terms of undergraduate background are the same as the M.A. and the degree does not lead to teacher certification in New York.

An M.A. degree in an appropriate content field or in Social Studies education and several years of teaching experience are generally required for applicants to the Doctor of Education and Doctor of Philosophy degree programs. In addition to the Teachers College admission requirements, doctoral applicants must submit a writing sample and recommendations written by persons qualified to address their potential for doctoral-level work. If the applicant will be in or near New York City, an interview is highly recommended.

Inquiries for the 32 point M.A. and the Ed.M. degrees should be directed to Professor Sandra Schmidt, Box 80, Teachers College; telephone: (212) 678-3174; email: schmidt@tc.edu.

Inquiries for the Ed.D. and Ph.D. degrees should be directed to Professor Anand Marri, Box 80, Teachers College; telephone: (212) 678-4023; email: marri@tc.edu.

## Degree Requirements:

The Master of Arts offers the following three tracks:

## Master of Arts in Social Studies (32 POINTS)

This program is designed for experienced teachers and those engaged in private school teaching. It requires a minimum of 32 points
and a master's thesis. This degree program focuses on social studies teaching in middle and high schools and fulfills the requirements for New York State Professional Certification. Points should be distributed as follows:

## Social Studies Core Courses (11 points):

- A\&HW 5031 Teacher education in social studies
- A\&HW 5232 Fieldwork: Social studies teacher education
- A\&HW 6530 Curriculum development, research, and supervision


## Students should choose ONE of the following courses:

- A\&HW 5030 Diversity and the social studies curriculum
- A\&HW 5035 History of the social studies since 1880
- A\&HW 5037 Advanced methods of teaching social studies
- A\&HW 5530 History of American social thought


## Social Studies Content Courses

(12-15 points): In consultation with an advisor, students should select courses to round out their knowledge of the subject matters taught in secondary schools. Courses taken at Teachers College include attention to both content and pedagogy. Courses can also be taken at Columbia University.

## Professional Development Courses

(6-9 points): Three Teachers College courses (2-3 points each) outside the Social Studies Program, chosen with advisor approval.

Further Requirements:
Students must also complete a master's thesis, selected with advisor approval.

## Master of Arts in Social Studies with Initial Teacher Certification (38 POINTS)

This program requires a minimum of 38 points and an integrative project. It is designed for those with little or no experience teaching secondary social studies. Successful completion of this program of study leads to the M.A. degree and recommendation for New York State Initial Certification (grades 7-12). Student teaching is undertaken in cooperating middle and high schools, in the New York Metropoli$\tan$ area. A committee of social studies faculty and cooperating professionals from the schools to which students are assigned supervise and evaluate the student teacher's work.

In order to complete all degree requirements successfully, this program typically demands
two terms of the academic year and two summer sessions, which can be taken in the same summer.

The 38 points should be distributed as follows:

## Social Studies Core Courses (9 points): <br> Required courses: <br> - A\&HW 4036 <br> The teaching of social studies <br> - A\&HW 5037 Advanced methods of social studies curriculum

Students should also take one of the following:

- A\&HW 5030 Diversity and the social studies curriculum
- A\&HW 5035 History of the social studies since 1880
- A\&HW 5530 History of American social thought


## Social Studies Content Courses

(10-12 points): In consultation with an advisor, students should select courses to round out their knowledge of the subject matters taught in secondary schools. Content courses taken at Teachers College include attention to both content and pedagogy. Courses can also be taken at Columbia University.

## Professional Development Courses

(6-9 points): To satisfy the college's breadth requirement students must take three Teachers College courses (for this purpose a course is defined as one in which 2 or 3 points are earned) outside the major program. Selected with advisor approval.

Student Teaching (10 points):

- A\&HW 4530 Seminar for student teachers in social studies*
- A\&HW 4729 Observation in the social studies
- A\&HW 4730 Supervised student teaching in social studies**
*Students enroll for 2 points in both the fall and spring.
** Students enroll for 3 points in both the fall and spring.


## Further Requirements:

Students must complete an integrative master's project. They must also satisfy the New York State certification requirement for study of a language other than English. (For additional requirements, please refer to the Teacher Education area of the Academic Resources section of this bulletin.)

## INSTEP Master of Arts in Social

 Studies for Inservice Teachers (32 POINTS)A three-year, summer Master of Arts degree is also offered. This program can be used for New York State Professional Certification for those individuals who hold Initial Certification and have necessary credentials. It is designed for teachers from both public and private schools. Jay Shuttleworth serves as the InStep Coordinator for social studies and she can be reached at jms150@columbia.edu.

Please note that all students must take a minimum of 12 points in content/pedagogy and three out-ofprogram courses in professional development for a minimum of 2 credits each.

Typical curriculum for INSTEP includes:

## Summer \#1:

- Advanced methods of social studies curriculum (A\&HW 5037)
- Social Studies Content w/Pedagogy Course
- Seminar (A\&HW 5931)
- Out-of-Program Course


## Summer \#2:

- Curriculum development, research, and supervision (A\&HW 6530) or Teacher education in the social studies (A\&HW 5031)
- Out-of-Program Course
- Social Studies Content w/Pedagogy Course
- Seminar (A\&HW 5931)


## January Weekend Between Summers

## \#2 and \#3:

- Action Research Mid-Year Seminar (A\&HW 5232)


## Summer \#3:

- Out-of-Program Course
- Seminar (A\&HW 5931)
- Social Studies Content w/Pedagogy Course

Graduation Requirement:
Master's Project in Action Research

## Master of Education in Social STUDIES (60 POINTS)

This program requires a minimum of 60 points and an integrative project. The degree is intended for experienced educators; it is aimed at developing leaders in social studies education for settings such as community colleges, high schools, curriculum agencies, publishing companies, foundations and museums. Emphasis is on specialized work in curriculum development and the subject matters, methods, and materials of instruction. This degree program is also suitable for students contemplating future doctoral study. The program is flexible in nature and can be tailored to the student's specific career goals.

## Social Studies Foundations, Methods and Professional Content (30 points minimum):

The courses in this area are intended to familiarize students with the historical development and current state of social studies education and to provide experience in research on educational practices. Students should consult with an advisor to determine what additional research courses outside the program will be needed in their individual programs of study; these out-of-program courses may be used to satisfy requirements in this area.

## Courses in the major field

(15 points minimum):
Required courses:

- A\&HW 5031 Teacher education in social studies
- A\&HW 5232 Fieldwork: Social studies teacher education
- A\&HW 5530 History of American social thought
- A\&HW 6530 Curriculum development,
- A\&HH 4070 History of education in the United States
- A\&HW 6500 Seminar in the history of social studies
Electives:
- A\&HW 5037 Advanced methods of social studies curriculum
- A\&HW 5203 Fieldwork in social studies
- A\&HW 6935 Studies in history and in the teaching of history and social studies


## Curriculum Study (12 points):

Required courses:

- A\&HW 5030 Diversity and the social studies curriculum (or a comparable course in diversity)
- One course in media and technology


## Social Studies Content Electives

 (15 points minimum) : A wide variety of courses combining content and pedagogy is offered in the program. Content courses are also available at Columbia University but should be approved by a program advisor before registration.Broad and Basic Areas of Professional Scholarship (18 points): All students at Teachers College must take at least three out-of-program courses. (For this requirement, a course is defined as one in which at least 2 points is earned). Selected with advisor's approval.

## Independent Study for the Master's Thesis ( 6 points):

- A\&HW $5931 \begin{aligned} & \text { Guided investigations in the } \\ & \text { teaching of social studies }\end{aligned}$


## Arts and Humanities

Research in social studies education

## Master's Project:

The master's thesis will develop out of each student's particular program of study. A student will work with an advisor to conceptualize, prepare, and write the integrative project. Students will enroll in the two courses above (A\&HW 5931, A\&HW 6030) in sequence across two semesters in order to plan and write the Ed.M. thesis in close consultation with the advisor.

## Doctor of Education ( 90 points)

The Doctor of Education in Social Studies requires 90 points of graduate study and a dissertation. The Ed.D. program in Social Studies leads to a professional degree designed to meet the needs of individuals preparing for careers of leadership and applied research in schools, universities, and community educational programs.

## Courses in the major field

(15 points minimum):
Required courses:

- A\&HW 5030 Diversity and the social studies curriculum
- A\&HW 5031 Teacher education in social studies
- A\&HW 5530 History of American social thought
- A\&HW 6500 Seminar in the history of
- A\&HW 6530 Curriculum development, research, and supervision

Research courses, seminars, and individual work ( 15 points minimum): Required courses:

- A\&HW 5503

Research paper in social studies (done in conjunction with the fourth round of doctoral seminar)

- A\&HW 6503
- A\&HW 7503

Other offerings:

- A\&HW 6030 Research in social studies education
- A\&HW 6203 Advanced fieldwork in social studies
- A\&HW 6903 Research and independent study in social studies
- A\&HH 6041 Historical method

Students are encouraged to take courses in both qualitative and quantitative research methodologies selected in consultation with an advisor.

## Broad and basic areas of professional

 scholarship (15 points minimum):In consultation with an advisor, students will select at least one course in each of the following areas: the nature of education; the nature of persons and the learning process; curriculum, schooling, and leadership; and methods of evaluation. Other coursework in this area should be tailored to the individual student's needs; consult an advisor.

## Content courses in the major field

 ( 15 points minimum): Soon after beginning this program, students should select an area of emphasis, either American history or modern history, broadly conceived. These courses should be selected for their applicability to the student's area of dissertation research. Coursework in the area of emphasis normally includes attention to the subject matters themselves as well as to questions related to educational programs in those subject matters.Further requirements:
In addition to the dissertation, there are other requirements. Students should consult an advisor in the Program and read the Doctoral Students Handbook for Social Studies.

Doctor of Philosophy ( 75 points)
The Doctor of Philosophy in Social Studies requires 75 points of graduate study and a dissertation. The Ph.D. degree program in Social Studies leads to a strongly researchoriented degree designed for individuals preparing for a career in teaching, conducting research, and working in teacher education in a university setting or a private or public policy organization.

## Courses in the major field

 (15 points minimum):- A\&HW 5030 Diversity and the social studies curriculum
- A\&HW 5031 Teacher education in social studies
- A\&HW 5530 History of American
- A\&HW 6500 History of social studies
- A\&HW 6530 Curriculum development, research, and supervision


## Content courses in the major field (21 points minimum):

Soon after beginning the program, students must select an area of specialization. Students may select either American history or modern
history. Students should select courses with an advisor, taking care to include courses relevant to the area of dissertation research. These courses may be taken at either Teachers College or the Graduate School of Arts and Sciences at Columbia University.

## Research Courses (18 points minimum): <br> Required Courses:

- A\&HH 6041 Historical method
- A\&HW 5503

Research paper in social studies (done in conjunction with the fourth round of doctoral seminar)

- A\&HW 6503 Doctoral seminar in social studies (taken four times consecutively during the first two years of the program)
- A\&HW 7503 Dissertation seminar in social studies (taken at the time of presentation of the doctoral proposal)
- A\&HW 8903 Dissertation advisement in the teaching of social studies

Other offerings:

- A\&HW 5931 Guided investigations in the teaching of social studies
- A\&HW 6030 Research in social studies education
- A\&HW 6203 Advanced fieldwork in social studies
- A\&HW 6903 Research and independent study in social studies
- A\&HW 6935 Studies in history and in the teaching of history and social studies

Broad and basic areas of professional scholarship ( 15 points minimum):
Same as "Broad and basic areas of professional scholarship" in Ed.D. degree program. See above.

## Further requirements:

In addition to the dissertation, students must satisfy the foreign language requirements equivalent to those of the department of the Columbia University Graduate School of Arts and Sciences with which their work is most closely identified. For Ph.D. students in Social Studies, the usual cognate department in the Graduate School is History or political science, though courses should be selected that support the student's scholarly interest and in close consultation with an academic advisor. Students should read the Requirements for Doctor of Philosophy obtainable from the Office of Doctoral Studies at Teachers College.

COURSES: ( ${ }^{*}=$ course open to non-majors)

## Foundations and Methods

A\&HW 4036. The teaching of social studies (3)
Mr. Wylie, Ms. Taylor, Ms. Merkel. Basic classroom methods for teaching social studies in secondary schools; teaching resources and aids; assessment and testing; classroom management.
*A\&HW 5030. Diversity and the social studies curriculum (3)
Professor Schmidt and Ms. Taylor. Curriculum theory and instructional methods related to teaching secondary school social studies in the diverse classroom. Particular attention paid to multicultural issues in urban settings.

## A\&HW 5031. Teacher education in social studies (3)

Mr. Wylie. Problems, issues, and new directions in teacher education in social studies.

## *A\&HW 5035. History of the social studies since 1880 (3)

Professor Gaudelli. An historical investigation of the development of the secondary school history/social studies curriculum, including questions related to objectives, content, and methods of instruction.

A\&HW 5037. Advanced methods of social studies curriculum (3)
Professor Schmidt and Mr. Wylie. Examination of alternatives to conventional curricular arrangements in social studies, including attention to oral history, interdisciplinary strategies and service learning.

## *A\&HW 5530. History of American social thought (3)

Faculty. History of American social thought as it has influenced and been influenced by theories of education and patterns of educational practice.

## *A\&HW 6500. Seminar in the history of social studies (3)

Professor Gaudelli. This course is for doctoral students taking the History of Social Studies since 1880 (A\&HW 5035) and runs concurrently with A\&HW 5035. Course requirements are designed specifically for doctoral students.
*A\&HW 6530. Curriculum development, research and supervision (3)
Professor Gaudelli. Aspects of curriculum; teaching and learning processes; attention to problems and techniques of supervision.

## Student Teaching

A\&HW 4530. Seminar for student teachers in social studies (2)
Faculty. Must be taken concurrently with A\&HW 4730. Restricted to majors. Includes issues of school safety and health issues in secondary schools.

A\&HW 4729. Observation in the social studies (0)
Faculty. Preliminary experience in the schools. Restricted to majors.

A\&HW 4730. Supervised student teaching in social studies (2-3)
Faculty. Permission of instructor required. Must be taken concurrently with A\&HW 4530. Restricted to majors.

## Social Studies Content

*A\&HW 4032. The study of world history and geography (2-3) Professor Gaudelli and Dr. Oppenheim. Particular attention to problems of conceptualization and interpretation involved in organizing and teaching world history with an emphasis in geography at both the middle and high school levels. Satisfies the New York State requirement for world history and geography. Also offered as an online course.
*A\&HW 4033. History and geography of Europe since 1914: Selected topics (3) Dr. Marino. Main themes in teaching recent European history within the geographic context of changing political boundaries. Selected topics may include the balance of power among nation states, imperialism, demographic and social change, fascism, Communism, European integration, and globalization.

## *A\&HW 4035. New York City as a learning laboratory (1-3)

Dr. Rosenfeld. New York City's cultural, social, governmental, business and financial institutions, neighborhoods, community associations and ethnic groups, as studied within the context of New York State history and geography through field experiences. Emphasis on analyzing conditions affecting economic and civic decision-making. Satisfies the New York State requirement for New York State history and geography.

## *A\&HW 4037. East Asia: Geographic perspectives (1-3)

Dr. Knapp. An overview of central themes in the modern history, geography, and culture of China, Japan, and Korea. Offered as online course.
*A\&HW 4038. The study of American
history and geography (2-3)
Dr. Tischler. Illustrative themes in American history and geography for middle and high school. Attention to the history and geography of New York State. Satisfies the New York State requirement for American history and geography as well as for New York State history and geography.
*A\&HW 4039. The United States
Constitution: Civic decision making (3) Professor Marri and Dr. Tischler. Major philosophical foundations, problems preceding and during the convention, the struggle for ratifi-
cation, detailed examination of the document, important court cases, non-written constitutional traditions, and unresolved constitutional issues. Selected cases from New York State history are highlighted. Satisfies the New York State civics requirement.
*A\&HW 4040. Women of the world: Issues in teaching (2-3)
Dr. Dauer. Women's lives viewed through history, geography, literature, human rights, demography, and economics provide the subject matter. Reconceptualizing the school curriculum is a dominant theme. Satisfies the New York State requirement for world history and geography.
*A\&HW 4041. Economic decision making in citizenship education (2-3)
Professor Marri, Mr. Siegel and Ms. Kuklis. Selected topics in the teaching of secondary school economics that align with main themes of New York State social studies curriculum.
*A\&HW 4043. Controversial issues and the secondary classroom (2-3)
Dr. Hess. This course is about the inclusion of discussions of controversial public issues in secondary school classrooms.

## Independent Research, Fieldwork and Internships

A\&HW 4903. Research and independent study in social studies (1-6)
Faculty. Permission of instructor required. To be taken under the direction of a faculty member. Students work individually or with others.

## A\&HW 5050. Special topics in social studies

 (1-3)Faculty. Current topics related to the field, such as Middle East history and Teaching The Levees.

A\&HW 5203. Fieldwork in social studies (1-6) Faculty. Permission of instructor required. Opportunity for qualified students, individually or in small groups, to develop and pursue projects, in consultation with an advisor, in schools, communities, and other field settings.

A\&HW 5223. Oral history as a multidisciplinary teaching tool (Noncredit or 1) Faculty. Students will learn the steps of oral history design for the classroom, including research, selection of interviewees, conduct of the interview, transcribing, reviewing, and editing.

A\&HW 5232. Fieldwork: Social studies teacher education (2-3)
Faculty. Supervised fieldwork, individual conferences and group seminar related to action research.

A\&HW 5430. Internship in the teaching of history and social sciences (1-3) Faculty. Permission of instructor required.

# Arts and Humanities 

Ordinarily in secondary schools, community colleges, teacher training programs or publishing work.

A\&HW 5503. Research paper in social studies (1-3)
Faculty. Required for doctoral students in fourth semester of doctoral seminar.

A\&HW 5931. Guided investigations in the teaching of social studies (1-3) Faculty. Permission of instructor required. For advanced students. Individual fieldwork in secondary school or introductory college social studies.

A\&HW 6030. Research in social studies education (1-3)
Faculty. Permission of instructor required. Individual fieldwork in secondary school or introductory college social studies.

A\&HW 6203. Advanced fieldwork in social studies (1-6)
Faculty. Permission of instructor required. See description for A\&HW 5203.

A\&HW 6403. Internship in college teaching in social studies (1-6)
Faculty. Permission of instructor required. Occasional opportunities in college programs in areas represented by the program.

A\&HW 6503. Doctoral seminar in social studies (2)
Faculty. Seminar focused on doctoral student research and contemporary social studies issues. Beginning doctoral students take the seminar for four consecutive semesters.

A\&HW 6903. Research and independent study in social studies (1-8)
Faculty. Permission of instructor required.
A\&HW 6935. Studies in history and in the teaching of history and social studies (1-3) Faculty. Permission of instructor required. Individual research and advanced historical method ordinarily related to a doctoral dissertation.

A\&HW 7503. Dissertation seminar in social studies (2)
Faculty. The purpose of the dissertation seminar is to develop and refine specific topics for dissertation research. Students should enroll in the dissertation seminar beginning only in the semester in which they intend to present their dissertation proposal for departmental review.

A\&HW 8903. Dissertation advisement in the teaching of social studies (0)
Faculty. Individual advisement on doctoral dissertation. Fee to equal 3 points at current tuition rate for each term. See catalog section on continuous registration for Ed.D./Ph.D. degrees.

## TEACHING OF ENGLISH

Program Coordinator:
Dr. Sheridan Blau
Program Office: (212) 678-3070
Website: www.tc.edu/a\&h/EnglishEd

## Degrees Offered:

TEACHING OF ENGLISH (ENGL)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Education in the College
Teaching of English (Ed.D.C.T.)
TEACHING OF ENGLISH LANGUAGE ARTS
7-12- initial certification (ENGL-INiT)
Master of Arts (M.A.)
TEACHING OF ENGLISH-
PROFESSIONAL CERTIFICATION (ENGL-PROF)
Master of Arts (M.A.)
TEACHING OF ENGLISH ADOLESCENCE EDUCATION-TRANSITIONAL B (ENGL-TRAN)
Master of Arts (M.A.)
ENGLISH EDUCATION (ENGD)
Doctor of Philosophy (Ph.D.)

## Program Description:

## Master of Arts (34 and 38 points)

An English teacher creates contexts for reading, writing, listening, speaking, and representing. Classrooms are transitory environments and demand teachers who are aware of themselves as learners, capable of adapting to change, skilled at negotiating, and respectful of diversity. Our program is student-centered and committed to the personal and professional development of teachers as they pursue their academic and research lives. We recognize and value the variety of needs and experiences of a diverse student body and strive to provide our students with rich and varied experiences.

Our program encourages students to seek a balance between breadth and specialization by offering an assortment of both methods and content courses. Methods courses focus on the design and implementation of curriculum as well as on multiple strategies and methods for the teaching of literature, writing, and language. Content courses, including literature and writing courses, model the various practices that are useful in teaching secondary students in English classrooms.

The Teaching of English Program offers the following M.A. degrees: Teaching of English leading toward Initial New York State Certification (38 points), and Teaching of English leading toward Professional Certification in New York State in Teaching of English (34 points).

All courses outlined below must be taken at Teachers College. We do not accept transfer credits. During the first semester, students will be assigned an academic faculty advisor who will assist them in choosing courses. It is recommended that students studying full-time begin their coursework the summer before the academic year.

## The Teaching of English with New York State Professional Certification (M.A. Degree, 34 points)

This program is designed for teachers already working in the field inservice who will not be student teaching. To earn this degree, students must complete 34 points of coursework at Teachers College.

## M.A. in the Teaching of English New York State Professional Certificate (INSTEP Program for Inservice Teachers)

INSTEP (InService Teacher Education Program) is offered to inservice teachers who are interested in taking the majority of required courses for a master's degree (M.A.) in the Teaching of English Program over three summers. The INSTEP program is guided by pedagogical, philosophical, and theoretical underpinnings that reflect current trends in rethinking the teaching of English language arts. Students accepted to the program form a cohort group that remains together throughout three summers, taking special classes offered only to INSTEP students. Students enroll in three INSTEP courses each summer and complete two additional online courses and a masters research project to complete the degree. See the English Education INSTEP website for additional information

## M.A. in the Teaching of English (Transitional B, 35 Points)

Program requirements are similar, but not identical to the 34 point program (Mentored teaching is required).

## The Teaching of English leading to an Initial Certification in New York State (M.A. Degree, 38 points) <br> The program that leads to initial certification is designed for individuals who are newly entering the field of secondary English teaching preservice. To earn this degree, students

must complete 38 points of coursework in the Teaching of English Program at Teachers College, including two semesters (fall and spring) of student teaching. Although most courses are held in the evenings, students must be available during the school day in order to student teach.

Please note that the English Education program looks for and values in its applicants, prior experience with secondary school-aged students in various contexts (schools, recreational centers, tutorials, and/or after-school workshops).

To be certified by New York State, additional requirements include:

- 24 points in English content courses (required prior to admission in the program)
- 12 points in education or methods courses
- 2-3 points college-approved and programoffered diversity education course
- Three college-approved foundation courses (2-3 points each) in History/Philosophy of Education, Disabilities/Special Education, and Human Development/Psychology
- One Detection and Reporting of Child Abuse and School Violence Prevention course (See Teacher Education section of this bulletin for details.)
- One semester of foreign language (If this requirement was not fulfilled as an undergraduate, these points may be obtained at Columbia University, Teachers College, or any other accredited institution. In some cases, this requirement may be waived by obtaining an appropriate score on the CLEP Test. CLEP registration forms are available in the Office of Teacher Education and School-based Support Services). If you choose to take a language class as an elective toward your degree, it must be a graduate level course
- Two semesters of student teaching
- Certification Exams: Liberal Arts \& Sciences Test (LAST), Assessment of Teaching Skills-Written (ATS-W), and Content Specialty Test in English (CST)


## Master of Education (60 points)

The Master of Education (Ed.M.) degree is a 60 -point program designed for individuals interested in advanced study in the field. The Ed.M. degree represents a commitment to research that students refine as they focus on a particular area of inquiry and provides opportunities to examine issues of pedagogy, theory, and research. A research study is required as a culminating project.

The Ed.M. degree is well suited for individuals who are currently teaching and who wish to concentrate further on their studies within the field of English education and/or individuals
who are thinking about undertaking doctoral work in English education. In some cases, individuals applying for the Ed.D. program in the Teaching of English are required to first complete the Ed.M. program.

Students admitted to the Ed.M. program have an M.A. degree and at least three years of prior teaching experience at the secondary classroom level, and now wish to further concentrate their studies within the field of education. The Ed.M. degree does not lead to certification for teaching.

## Doctoral Program

The primary purpose of our doctoral program is to prepare highly qualified educators to function as researchers, scholars, and professional leaders in the field of English education. Students who enter the doctoral program in English Education must have at least five years of teaching experience at either the secondary school or college level, and have completed graduate work at an accredited institution. The work students undertake in the English Education program will help them to refine their theoretical, pedagogical, and research expertise. In consultation with their professors students identify a particular area of inquiry for their dissertation research.

Both the Ed.D. and Ph.D. programs in English education consist of theoretical, pedagogical, and research-oriented work. Students eventually focus their interests around a particular area of inquiry, which is informed by a broad reading of theory and research studies. This work becomes consolidated and refined through the dissertation, a study that evidences original research and makes a substantial contribution to knowledge in the field.

Each student, upon entry into the program, is assigned an academic advisor who will advise on program plan, certification exams, and all coursework.

## Special Application <br> Requirements/Information:

The M.A. degree in the Teaching of English is designed for students who plan to teach or are currently teaching. Prior to entering the program, applicants must complete at least 24 undergraduate and/or graduate credits in English, or their equivalent. The program looks for coursework across a range of literatures and content areas, including but not limited to: U.S./British/World Literature, Multicultural Literature, Genre Studies, Female Authors, Authors of Color, Adolescent Literature, Theory and Criticism, and Media Studies. We look carefully at undergraduate GPA, two letters of recommendation (one of
which must be academic in nature), personal statement, and anything else that suggests a commitment to teaching and schooling. Applicants should indicate their recent experience with secondary school aged students in their personal statements.

The Ed.M. degree in Teaching of English offers experienced teachers the opportunity to continue their examination of issues, pedagogy, policy, theory and practice in the teaching of English. Special emphasis is placed on class-room-based research and an examination of leadership roles in schools. In addition to the general Teachers College admission requirements, Ed.M. applicants are required to submit a writing sample and two letters of recommendation. A third letter is encouraged. Also, applicants must have earned an M.A. in English, English Education, or in an analogous field, and must have at least three years of teaching experience at the secondary classroom level. A personal interview with faculty is required.

The Ed.D., Ed.D.C.T., and Ph.D. degrees in English Education combine coursework and fieldwork for teachers who have the desire to examine theoretical, research, and pedagogical principles as they apply to practice; who wish to prepare prospective teachers or engage in professional development work with inservice teachers; and who wish to prepare themselves for leadership roles in the fields of Teaching of English and/or English Education. Applicants are required to have at least five years of classroom teaching experience and an M.A. in English, English Education or a closely related field. In addition to the general Teachers College admission requirements, applicants are required to submit a writing sample and one additional letter of recommendation. A personal interview session with faculty is also strongly recommended.

## Degree Requirements

## Master of Arts

## ( 34 AND 38-POINT PROGRAMS)

Methods-New York State requires a minimum of 12 points of methods courses. The methods coursework is designed to provide students with a strong foundation in the Teaching of English. The Teaching of Reading, The Teaching of Writing, and Writing: Nonfiction courses are usually taken at the beginning of the program to facilitate students' understanding of subsequent courses. English Methods follows, integrating various methodologies while addressing language and curricular components. An additional methods course allows students to concentrate on a specific topic of interest.

## Arts and Humanities

Required courses include:

- A\&HE 4057 English methods (3)
- A\&HE 4058 Teaching of reading (3)
- A\&HE 4151* Teaching of writing (3)
- A\&HE 5518** Teaching English in diverse social and cultural contexts (2-3)
*Taken as a 6 point block with A\&HE 4156, Writing: Nonfiction
**A\&HE 5518 meets both the College-wide and the New York State diversity requirements.

In addition, students must choose at least one topic-specific methods course:

- A\&HE 4152 Literacies and technologies in the secondary English classroom (3)
- A\&HE 4155 Critical issues in the secondary English classroom (2-3)
- A\&HE 4157 Writing: Fiction and personal narrative (3)
- A\&HE 4158 Writing: Poetry (3)
- A\&HE 4550 Teaching of poetry (3)
- A\&HE 4551 Teaching of Shakespeare (3)
- A\&HE 4552 Curriculum and assessment in the secondary English classroom (2)

Content- Content coursework consists of writing and literature requirements:

Writing: This requirement is met by taking the six point writing block:

- A\&HE 4151 Teaching of writing (3)
- A\&HE 4156 Writing: Nonfiction (3)

Literature: At least one literature course within the program is required. Courses include: Cultural perspectives, Feminist perspectives, Adolescent literature, Critical approaches to literature, and Literature and teaching.

## Breadth Requirement

Breadth courses are intended to broaden students' knowledge of the history of education, philosophies of education, and educational issues and practices beyond their particular area of concentration. All students must take at least three breadth courses (courses not designated "A\&HE"). Breadth points must be used to meet the New York State requirements for classes in History/Philosophy of Education, Disabilities/Special Education and Human Development/Psychology if these have not been taken in previous college-level coursework. These courses may be taken as pass/fail. Breadth courses must meet the following criteria:

- They must not possess the "A\&HE" prefix;
- They must be Teachers College courses;
- They must be for a minimum of 2 points each.

Electives- Electives provide students in the 34 -point program the opportunity to explore particular interests as they design their own programs in consultation with an academic faculty advisor. Electives can be any graduate level courses at Teachers College or Columbia University and a student may take as many points as needed to finish his or her degree program. If students in the 38 -point program meet all of their degree requirements through required coursework, electives are not needed.

Master's Seminar- All M.A. students are required to enroll in the A\&HE 5590, Master's seminar. Students in the 38 -point program enroll in A\&HE 5590 the same semester they enroll in phase 2 of A\&HE 4750, Supervised teaching of English. Students in the 34 -point program enroll in A\&HE 5590, during their final semester. All students work with an academic faculty advisor to design and complete their master's projects.

Student Teaching- Students in the 38 -point Teaching of English program have two separate semesters of student teaching. As required by New York State, one of these experiences is in a middle school and the other is in a high school. Most placements are made in urban public schools in New York City. Commuting to one of the outer boroughs should be expected.

Student teaching experiences differ by semester. In the first (Phase 1) semester, a pair of students may be placed in a classroom under the direction of a single cooperating teacher. The cooperating teacher has primary responsibility for designing the curriculum. While students do not have the major responsibility for designing or organizing the course of instruction, they are active participants in the classroom and school communities. Although the Phase 1 experience varies, students are engaged in observation, group work with students, conferencing, and teaching. During this semester, students understand, appreciate, learn from, and coach students as readers and writers. In their second (Phase 2) semester, students work one-on-one with a cooperating teacher and are expected to take on full responsibility for designing lessons and assessing learning.

For students in the 38 -point program, the student teaching experience is accompanied in both semesters by A\&HE 4750, Supervised teaching of English and A\&HE 4751, Fieldwork and observation in secondary English. These courses facilitate the development of skills and strategies that are needed for successful teaching. They also serve as a forum to address needs, issues, and problems that may
arise. In addition, supervisors from Teachers College visit student teachers on at least four occasions each semester. Supervisors talk with student teachers before and after each observation and consult with them on an individual basis regarding their progress. Students in the 34 -point program are also expected to complete two semesters of A\&HE 4751, Fieldwork and observation in secondary English, but without enrolling in Supervised teaching (A\&HE 4750).

## Master of Education

The Ed.M. program is student-centered and committed to the personal and professional development of English teachers as they pursue their academic and research lives. We recognize and value the variety of needs and experiences of our diverse student body, and we strive to provide our students with individualized programs. All students pursuing the Ed.M. degree will have a faculty advisor with whom they will work throughout the course of their degree. While the Ed.M. program offers tremendous flexibility in coursework, the following program requirements must be fulfilled:

English Education Courses (no more than 45 points)- Depending upon the number of points transferred in, students must complete between 15 and 45 points at the A\&HE 4000, A\&HE 5000, and A\&HE 6000 levels. Students transferring up to 30 points should take most of their courses at the more advanced A\&HE 5000 and A\&HE 6000 levels. It is possible to substitute a $12-15$ point specialization in an area other than English Education and/or one graduatelevel course at Columbia University with an academic faculty advisor's approval.

## A\&HE 4000 level courses

(no more than 15 points):

- A\&HE 4050 Literature and teaching (3)
- A\&HE 4051 Critical approaches to literature (3)
- A\&HE 4052 Adolescents and literature (3)
- A\&HE 4053 Cultural perspectives and literature (3)
- A\&HE 4056 Feminist perspectives
- A\&HE 4057 English methods (3)
- A\&HE 4058 Teaching of reading (3)
- A\&HE 4100 Teaching drama and theater (3)
- A\&HE 4150 Teaching literacies in secondary maths, sciences, and the humanities (3)
- A\&HE 4151 Teaching of writing (3)
- A\&HE 4152 Literacies and technologies in the secondary English classroom (3)
- A\&HE 4155 Critical issues in the secondary

English classroom (2-3)

- A\&HE 4156 Writing: Nonfiction (3)
- A\&HE 4157
- A\&HE 4158
- A\&HE 4550
- A\&HE 4551
- A\&HE 4552
- A\&HE 4561
- A\&HE 4751
- A\&HE 4904

Writing: Fiction and personal narrative (3)
Writing: Poetry (3)
Teaching of poetry (3) Teaching of Shakespeare (3)
Curriculum and assessment in the secondary English classroom (3) leaching narrative and story (3)
Fieldwork and observation in secondary English (1-2) Independent study in teaching English (1-6)

## A\&HE 5000 and A\&HE 6000 level

 courses (no more than 30 points):- A\&HE 5149 Writing research: Methods and assumptions (3)
- A\&HE 5150 Research in practice (3)
- A\&HE 5151 Perspectives on "popular"
- A\&HE 5154
- A\&HE 5204 Fieldwork in teaching of English (1-6)
- A\&HE 5504 Research paper: Teaching of English (3)
- A\&HE 5514 Readers' responses: Research, theory, and practice (3)
- A\&HE 5518 Teaching English in diverse social and cultural contexts (2-3)
- A\&HE 6011 The politics of teaching English (3)
- A\&HE 6015 College teaching of English (3)
- A\&HE 6151 Narrative research in English education (3)
- A\&HE 6152 Advanced narrative research in English education (3)
- A\&HE 6204 Advanced fieldwork in teaching English (1-6)
- A\&HE 6404
- A\&HE 6450 Internship in teaching English (1-3)
- A\&HE 6514 Postmodern textual theories (3)
- A\&HE 6904 Research and independent study (1-6)


## Breadth Courses

At least three 2-point courses. Educational foundations courses are intended to broaden students' knowledge of the history of education, philosophies of education, and educational issues and practices beyond their particular areas of concentration. Students must take at least three Teachers College courses (for a minimum of 2 points each) from programs outside the English Education Program (that is, three courses that do not carry the A\&HE prefix). The breadth requirement must be completed while at Teachers College; students may not transfer in breadth courses.

## Research Methods Courses

At least 9 points (three courses) of research methods must be completed for the Ed.M. degree. These courses may be from either 4000 or 5000 levels. Although courses may include both quantitative and/or qualitative methods, we recommend that at least one course represent study in the area of qualitative research. At least one course should be taken from the research offerings in the English Education Program: the two other courses may be taken in any department at Teachers College.

## A\&HE 5504. Research paper: Teaching

 of English (3)The research paper for A\&HE 5504, required of all Ed.M. students, is the core of the Ed.M. program. This research paper represents a refined presentation of the student's research question and area of inquiry. The purpose of this paper is to evidence the student's ability to do independent research. It entails work that results in an original synthesis of a broad reading of theory and research, and is underscored by the student's practical experience as a teacher. The A\&HE 5504 research paper includes:
(a) A rationale for the project and demonstration of an understanding of the literature of the field related to the topic(s) undertaken;
(b) A pilot study, including data gathering and analysis and justification of research methods employed;
(c) A critique of the pilot study, including the student's reflections on the study's design and methodology as well as on her/his research strengths and weaknesses; and
(d) Implications relevant to the student's future research.
If the student's intent is to continue on for doctoral work, the research paper for A\&HE 5504 may serve as a prelude to work on a doctoral dissertation. Students may continue to conduct and write up their research while enrolled in the internship and fieldwork courses.

## Doctor of Education (90 points)

The Program in English Education at Teachers College offers three distinct programs in doctoral work. The Doctor of Education (Ed.D.) is designed to prepare future teacher educators and other specialists in the teaching of English for teaching and professional leadership roles in colleges and universities, in schools and school districts, in foundations, and in state and federal educational agencies. The program offers intensive study of the history of English education as an intellectual discipline, and field of practice, and of the theoretical and pedagogical debates that have shaped research and practice in the fields of literary studies,
rhetoric and composition, literacy studies, and English language study.

## Doctor of Education in the College Teaching of English ( 90 points)

Doctor of Education in the College Teaching of English (Ed.D.C.T.) is designed to prepare candidates for positions as college and university faculty members, researchers, administrators of writing centers, and directors of college writing programs. The Ed.D.C.T. degree program, structured to develop the depth and breadth in candidates' knowledge of teaching college English, provides a rigorous background in relevant theoretical debates in writing (i.e., basic writing; first-year composition; composition theory/pedagogy; writing assessments; writing and technology; reading and writing), in the teaching of literature, and language study (i.e., English as a second language; multilingualism and speech communities; language and cultural/political identities; international and transnational perspectives on language).

## Doctor of Philosophy (75 Points)

The Doctor of Philosophy ( 75 points) is designed to prepare candidates as researchers and scholars who are particularly interested in the philosophical and theoretical issues in the field as these are defined within specific historical, social, cultural, literary, and rhetorical matrices. Candidates in all programs can expect to explore current professional issues, debates, and ethical dilemmas within the teaching of English as well as within the general arenas of teaching, learning, and working in various educational communities. Courses encourage candidates to conceptualize pedagogical and curricular philosophies for the teaching of English, consider social and cultural differences in teaching and learning, investigate methods, modes of interpretation, and theoretical investments that one might bring to bear on questions of knowledge, and to survey resources for professional development. All areas of study have consistent emphases on social, cultural, and political contexts in English Education and college English.

Doctoral candidates: Always consult with your Academic Advisor prior to registration.

Required courses for ALL English Education/ Teaching of English doctoral candidates:

- A\&HE 5504 Research paper:
- A\&HE 6504 Teaching of English
- A\&HE 7504 Teaching of English*

Seminar: Teaching

- A\&HE 8904 Dissertation advisement in the teaching of English


## Arts and Humanities

Candidates to the Ed.D.C.T are required to take ALL of the above mentioned plus**: - A\&HE 6015 College teaching of English

- A\&HE 6404 Internship in college teaching of English**
*Can be taken more than once.
**Candidates for the Ed.D. in the College Teaching of English who have not completed the equivalent of at least one year of full-time teaching as a college teacher of English are required to include A\&HE 6404 in their doctoral programs. (See course listing for description). Interns will work with an experienced college English instructor for a period of at least one semester. Candidates who have the equivalent of at least one year of full-time college teaching experience can take A\&HE 6404 to design/pilot an experimental study that explores current issues in the field.

Research methods courses (a minimum of 12 points) It is highly recommended that the candidates include at least two of the following:

- A\&HE 5149 Writing research:

Methods and assumptions

- A\&HE 5150 Research in practice
- A\&HE 6151 Narrative research in English education
- A\&HE 6152 Advanced narrative research in English education
Other choices may include other research courses offered across the College.

General Guidelines on the English education doctoral program:

1) Program Plan: During the first year of study, students file a program plan and Statement of Total Program (the forms are available in the Office of Doctoral Studies) within the first two semesters of acceptance to the degree program. Once these procedures are completed, students will know how many and which courses they will need to complete their doctoral program.

The program plan is designed to represent a coherent network of courses, reflecting topics in English education. All areas of study should have consistent emphases on social, cultural and political contexts in English education, and issues of teacher education. Represented schematically, these areas include but are not limited to:

## Literary Studies:

Literature courses, literary theory, and research in literature courses at the A\&HE 5000 and A\&HE 6000 levels.

## Rhetorical Studies:

Writing, composition theory and rhetorical theory courses at the A\&HE 5000 and A\&HE 6000 levels.

## Methodological and Pedagogical Studies:

Courses at the A\&HE 5000 and A\&HE 6000
level that address theoretical and practical applications within the field of English education.
2) Coursework Guidelines: The number of courses students take depends in part on the number of points students transfer from previous graduate work. Students working toward a Ed.D. ( 90 points) degree may transfer a maximum of 40 points and will thus complete at least 50 points while in the program for their doctoral work. Students working toward a Ph.D. ( 75 points) degree may transfer a maximum of 30 points and will thus complete at least 45 points while in the program for their doctoral work. An academic advisor must approve all coursework in a student's program plan including any exceptions to the following:

- No course that is "R" (attendance) credit or that is " P " (pass/fail) may be counted toward the Ed.D. aside from A\&HE 6504: Doctoral seminar and A\&HE 7504: Dissertation seminar in teaching English.
- Students must consult their academic advisors when they undertake an independent study, an internship, fieldwork courses, or graduate courses at Columbia University.
- Doctoral students are generally discouraged from taking 4000 -level courses and must consult with their academic advisors before registering for these courses.
- Doctoral students must complete a minimum of 12 points of research methods courses.

3) Candidates should take a minimum of three courses outside the English Education Program (Courses not designated A\&HE).
4) Certification Examination: Doctoral candidates in the English Education Program are required to write two parts of the certification examinations: Certification Exam 1 and Certification Exam 2. The terms 1 and 2 are used to emphasize a difference in focus. The Certification Exam 1 usually focuses on the historical breadth of English Education, where as the Certification Exam 2 takes a more refined focus and directly relates to one's interest in a specific area of inquiry. The College policy requires candidates to complete a minimum of 20 points after taking Certification Exam 1. Those 20 points may include the points taken during the term in which the exam was taken.
5) Dissertation Proposal (A\&HE 7504): The doctoral dissertation proposal consolidates the work candidates have done in courses, professional reading, and the two certification examinations. It is a 40 to 60 -page document, which outlines a coherent account of the work a candidate wants to undertake for dissertation research.
6) Dissertation: The doctoral dissertation evolves out of the coursework in which candidates have been engaged; the readings completed and synthesized for the certification examinations; the A\&HE 5504 research paper; classroom teaching and research experiences; and regular consultations and discussions with an academic advisor. As candidates write their dissertations, they enroll in A\&HE 8904, Dissertation advisement in teaching English, which is designed to help candidates shape the writing of the following dissertation components: review of literature, research methodology, data analysis, and implications of the research.
7) Continuous enrollment required. Consult your advisor about procedures that address conflicts with this policy.

COURSES: ( $*=$ course open to non-majors)
*A\&HE 4050. Literature and teaching (3) Faculty. An examination of multiple approaches to reading traditional and contemporary texts using theory, criticism, and textual practices. Special fee required.
*A\&HE 4051. Critical approaches to literature (2-3)
Faculty. Literary selections are examined through various critical frameworks emphasizing the way texts are constructed and how readers negotiate meaning with texts. Special fee required.

A\&HE 4052. Adolescents and literature (3) Faculty. Discussions focus on issues of adolescent diversity, urban experience, gender and the teaching of adolescents and literature. Special fee required.

## *A\&HE 4053. Cultural perspectives and literature (3)

Faculty. Contemporary literary selections are explored within a theoretical context that emphasizes historical, cultural, political, and aesthetic dimensions of these texts. Special fee required.

## *A\&HE 4056. Feminist perspectives and literature (2-3)

Faculty. An examination of women writers of the 20th century, exploring common themes: growing up female, marriage and the family, women as artists, and minority women within a critical feminist framework. Special fee required.

A\&HE 4057. English methods (3)
Faculty. A required course which focuses on practical aspects of teaching English, including lesson and unit plans, effective teaching strategies, evaluation and assessment, curriculum design, and integration of language arts. The overarching theme addresses literacy practices as historically situated and contextualized. Special fee required.

A\&HE 4058. Teaching of reading (3)
Faculty. The course focuses on helping teachers examine theoretical and pedagogical principles relevant to teaching literary and non-literary texts with emphasis on the relations of texts and readers. Special fee required.

A\&HE 4100. Teaching drama and theater (3) Faculty. The role of drama in the classroom. Students will examine the role of theaters in the community, examining production, performance, and the educative power of drama. Special fee required.

A\&HE 4150. Teaching literacies in secondary maths, sciences, and the humanities (3) Faculty. Prepares secondary teachers in disciplines other than English to meet new literacy requirements for both teachers and students. The effective use of listening, speaking, reading writing and other modes of representing to promote learning will be demonstrated. This class may be appropriate for English majors who plan to teach humanities. Special fee required.

A\&HE 4151. Teaching of writing (3) Faculty. The course integrates theory and practice for teachers. Topics include the textual character of genres, critical perspectives on writing instruction, research on writing, evaluation and assessment of writing, and classroom methods for teaching writing. This course is taught with A\&HE 4156, Writing: Nonfiction, as part of a 6 -point sequence. Special fee required.

A\&HE 4152. Literacies and technologies in the secondary English classroom (3) Faculty. Introduces students to media technology as it relates to secondary English education. English is an increasingly mediated and technologized discipline. New technologies have enabled emerging practices that have significant implications for literacy learning and teaching. Special fee required.

A\&HE 4155. Critical issues in the secondary English classroom (2-3)
Faculty. An examination of critical issues that shape and reshape the teaching and learning of literacies in English classrooms. Special fee required.

A\&HE 4156. Writing: Nonfiction (1) Faculty. A non-fiction writing workshop. This course is taught as part of a 6 -point block with A\&HE 4151, Teaching of writing. Special fee required.

A\&HE 4157. Writing: Fiction and personal narrative (3)
Faculty. A fiction writing class combined with close readings of selected writers. Special fee required.

A\&HE 4158. Writing: Poetry (3)
Faculty. A poetry writing class combined with close readings of selected poets. Special fee required.

A\&HE 4550. Teaching of poetry (3)
Faculty. Experience in reading and writing poetry, designing curriculum, and determining effective teaching practices. Special fee required.

A\&HE 4551. Teaching of Shakespeare (3) Faculty. An examination of diverse theoretical perspectives and pedagogical principles for teaching Shakespeare. Special fee required.

A\&HE 4552. Curriculum and assessment in the secondary English classroom (2) Faculty. Dominant curriculum theories of the 20th century, related assessment and evaluation methods and traditions, and current approaches to assessing student and teacher learning in the secondary English classroom. Special fee required.

## A\&HE 4556. Seminar for inservice teachers

 (1)Faculty. A required course for 34 and 35 -point M.A. students, this seminar is designed to support practicing teachers as they compose and expand their teaching lives. The seminar will provide teachers with a community of colleagues with whom they can build and explore professional growth in the areas of instructional strategies, pedagogy, and the critical issues of contemporary teaching, as well as an opportunity to reflect and discuss issues of concern. Offered fall semester only.

A\&HE 4557. Transitional B: Seminar in the teaching of English (1)
Faculty. This 1 -credit course serves as a follow up to A\&HE 4556 for students enrolled in the Transitional B program. Through reading, writing, videotaping, reflecting and discussing, inservice teachers will continue to develop their professional identity, confidence, and resources. The class will offer a supportive community of colleagues and will focus on praxis- the reciprocity of theory and practice- in NYC's public schools. Offered spring semester only.
*A\&HE 4561. Teaching narrative and story (3)
Faculty. An examination of narrative theories, narrative design, and philosophies of composition.

A\&HE 4750. Supervised teaching of English (3)

Faculty. Majors only. Students may satisfy state certification requirements by participating in the supervised teaching program in the fall and spring semesters. Students should plan to
reserve part of each day Monday through Friday for classroom experience. Special fee required.

A\&HE 4751. Fieldwork and observation in secondary English (1-2)
Faculty. Majors only. A series of guided observations of schools, teachers, and students. Student teachers will synthesize theoretical knowledge with intense practical experience to integrate educational philosophy with the reality of day-to-day life teaching in a secondary English language arts classroom. Special fee required.

## A\&HE 4904. Independent study in

 teaching English (1-6)Faculty. Permission of instructor required. Research and independent study under the direction of a faculty member. Students work individually or with others.

## A\&HE 5149. Writing research: Methods and assumptions (3)

Faculty. Examines assumptions that undergird the range of philosophies, intellectual traditions, and points of view that influence research writing. Special fee required.
A\&HE 5150. Research in practice (3)
Faculty. Examines the role of practitioner qualitative research in knowledge production, teaching, and learning. Special fee required.

## A\&HE 5151. Perspectives on "popular" texts in English classrooms (1-3)

Faculty. This course unites post-structuralist literary theory with cultural studies. Through a range of class activities and readings, the course will explore intersections between feminism, post-modern aesthetics, and "popular" texts. Special fee required.

A\&HE 5154. Rhetoric and teaching (3) Faculty. The course examines the applicability of the rhetorical tradition for students and teachers, emphasizing the culture and knowledge exhibited in texts, writers, and readers. Special fee required.

## A\&HE 5204. Fieldwork in teaching

English (1-6)
Faculty. Permission of instructor required. Opportunity for students, individually or in small groups, to develop and pursue projects, in consultation with an advisor, in schools, and other field settings, and to participate in workshops with expert practitioners.

## A\&HE 5504. Research paper:

## Teaching of English (3)

Faculty. Required of all Ed.M., Ed.D., and Ph.D. students. This course seeks to facilitate the writing of the paper representing a refined presentation of a student's research questions and area of inquiry. Special fee required.

A\&HE 5514. Literature and literary study: Research, theory, and practice (3) Faculty. This course is an advanced seminar for students exploring research issues related to the reading and teaching of literature. Various models of critical literacy will be studied including the influence of psychological, transactional, feminist, and social accounts of reading on current theory and practice. Special fee required.

A\&HE 5518. Teaching English in diverse social and cultural contexts (2-3)
Faculty. A seminar examining how gender, class, race, ethnicity and sexual orientation issues inform instructional goals, curriculum planning/implementation, and practices in the teaching of literature, language, and composition in English language arts classrooms. Special fee required.

## A\&HE 5590. Master's seminar: Teaching of English (1)

Faculty. Designed to prepare students for completing the integrative project for the M.A. degree, students participate in seminars which are oriented towards creating an academic, professional, and social network. Students research an area of special interest and share their findings. Special fee required.

## A\&HE 6011. The politics of teaching English

 (3)Faculty. An examination of political and sociocultural theories of language, literature, and composition that inform diverse ideological constructions of knowledge, curriculum, and pedagogy in English language arts education. Special fee required.

A\&HE 6015. College teaching of English (3) Faculty. An examination of programs and methods of instruction in English courses on the college level. Special fee required.

## A\&HE 6151. Narrative research in

English education (3)
Faculty. Permission of instructor required. A survey of approaches to and examples of narrative research, including oral history, life history, biography, autobiography, and autoethnography. Special fee required.

A\&HE 6152. Advanced narrative research in English education (3)
Faculty. This advanced course will provide context for students to build on their prior knowledge of various genres of narrative research (biography, autobiography, testimonial, oral history, or life history, for example), to engage in sustained study of a variety of theoretical and methodological perspectives that might frame their research, and to further develop their own narrative research projects.

## A\&HE 6204. Advanced fieldwork in

 teaching English (1-6)Faculty. Permission of instructor required. See description for A\&HE 5204.

A\&HE 6404. Internship in college teaching of English (1-6)
Faculty. Permission of instructor required. Opportunities to work in various field-based sites. Students must inquire to see if opportunities are available during any given semester.

## A\&HE 6450. Internship in teaching

 English (1-3)Faculty. Permission of instructor required. A forum designed to offer students an opportunity to explore key issues in the field through their involvement with students, teachers, and classroom settings throughout the city. Special fee required.

## A\&HE 6504. Doctoral seminar: Teaching

 of English (1-3)Faculty. (Must be taken at least once during course of doctoral study.) Doctoral seminar acquaints students with the uses and history of the field of English Education and helps students focus on issues that will shape their own research. Special fee required.

A\&HE 6514. Postmodern textual theories (3) Faculty. Teachers will examine literary and theoretical texts central to postmodern theory. Students will explore, through a diverse range of means and media, texts deemed pivotal to postmodern approaches and principles. Special fee required.

## A\&HE 6904. Research and independent

 study (1-6)Faculty. Permission of instructor required. Advanced research and independent study under the direction of a faculty member. Students work individually or with others.

## A\&HE 7504. Dissertation seminar:

 Teaching of English (3)Faculty. Permission of instructor required. Designed to help students shape the writing of the review of literature, research methodology, data analysis and implications of the research. Special fee required.

A\&HE 8904. Dissertation advisement in the teaching of English (0)
Faculty. Permission of instructor required. All Ed.D. and Ph.D. students must be continuously registered for Dissertation Advisement until completion of the program. Fee to equal 3 points at current tuition rate for each term.

## TEACHING OF ENGLISH TO SPEAKERS OF OTHER LANGUAGES

Program Coordinator:<br>Professor ZhaoHong Han<br>Program Office: (212) 678-3795<br>Email: tesolal@tc.edu<br>Website: www.tc.edu/a\&h/Tesol

For updated information on the TESOL Program, consult the TESOL web page at: www.tc.columbia.edu/academic/tesol/.
For questions about the TESOL program, email: TESOL@tc.columbia.edu.

For updated information on the TESOL Certificate Program, consult the TESOL Certificate Program web page at: www.tc.edu/a\&h/TesolCert.

## Degrees Offered:

TESOL-TEACHING OF ENGLISH TO
SPEAKERS OF OTHER LANGUAGES (TESL)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

TESOL- INITIAL CERTIFICATION (TESL-INIT)
Master of Arts (M.A.)

## Program Description:

The program in TESOL provides students with a solid foundation in the English language so that pedagogical and research questions related to the teaching, learning and assessment of English as a second or foreign language (ESL/EFL) may be formulated, examined and resolved. More specifically, the TESOL program helps students develop strategies, firmly grounded in theory, research and practice, to teach ESL in the U.S., to teach EFL internationally, or to do research on the teaching, learning or assessment of English as a second or foreign language. The program emphasizes study in the following areas:

- Second language teaching methodologies
- Teaching of the language skills
- Content area education for ESL students
- ESL/EFL materials development and curriculum design
- Language teacher education
- Language teacher observation and supervision
- Second language acquisition
- Second language assessment
- Classroom interaction
- Second language teaching and literacy
- Language program evaluation
- Technology and language teaching and learning

Graduates from the TESOL program typically teach ESL or EFL in elementary or secondary schools, in colleges or universities, in language schools or institutes in the United States or abroad, or in businesses or international organizations. Others work for publishers or computer companies that produce ESL/EFL products. Finally, many TESOL graduates work as language program administrators or teacher educators in schools, colleges, or universities around the world.

As New York City offers one of the most diverse settings in the world for teaching ESL, the TESOL program collaborates with a number of schools in the city to provide students with opportunities to teach or do research in these settings. In addition, the TESOL and Applied Linguistics programs jointly sponsor the Community Language Program (CLP), a program to teach ESL and foreign languages to adults. The CLP serves as an on-site language education lab in which students enrolled in the TESOL program teach the courses, help administer the program, supervise other teachers, and use the CLP as a setting for empirical inquiry. For more information on the CLP, see the website at www.tc.edu/tesol/CLP.

## Special Application <br> Requirements/Information:

Applications will be accepted for the fall and spring application deadlines as advertised by the College. For the K-12 TESOL program, only fall applications will be accepted. Any application received after those dates or incomplete applications will not be reviewed.

A writing sample is required with all Ed.M. and Ed.D. applications. Applicants to the Ed.M. and Ed.D. programs must have an M.A. in TESOL, Applied Linguistics or a related field.

Ed.M. applicants may request to transfer up to 30 credit points into the TESOL program from previous graduate study at an accredited institution. Applicants who have already earned an M.A. from Teachers College may transfer a total of 15 points in related areas from an accredited institution. Ed.D. students may transfer up to 45 points from previous graduate study at an accredited institution. All transfer of credit points must meet the approval of a faculty advisor.

All students are expected to write and speak in a way that is appropriate to their professional responsibilities. Students having difficulty in achieving these standards will be required to take additional coursework or seek help from the TC Writing Center. All non-native speakers of English, including those who have an
undergraduate degree from an English-medium university in the U.S. or abroad, must submit either:

- A total minimum score of 102 on the TOEFL IBT exam. Also a minimum score of 26 on the speaking and writing sections and a minimum of 25 on the reading and listening sections; or
- A minimum score of 600 on the paper/pencil TOEFL or a minimum score of 250 on the TOEFL CBT. Also a minimum score of a 50 on the Test of Spoken English (TSE) and a minimum score of 5 on the Test of Written English (TWE); or
- A score of B or better on the Cambridge Certificate of Proficiency in English (CEP); or
- A score of 7.0 or better on the Cambridge International English Language Testing System (IELTS).

Expired scores will not be accepted.

## Degree Requirements:

A grade average of $B$ or higher is required each semester within the major for all degrees. Students are required to maintain satisfactory academic progress toward degree completion. Consult program of study guides for additional information.

The TESOL program offers three majors in the Master of Arts program: The general track, the K-12 track, and the program in Tokyo.

## Master of Arts, General Track (36 POINTS)

The TESOL General Track Program offers a 36-point Master of Arts degree for students wishing to teach in any of a variety of settings except in the New York State public schools. The General Track does not prepare students to obtain New York State K-12 Certification in ESL (see below). Students in the TESOL General Track Program take a wide range of courses offered in TESOL and Applied Linguistics.

Required courses:

- A\&HT 4077

TESOL classroom practices (3)

- A\&HL 4085 Pedagogical English grammar (3)
- A\&HL 4087 Introduction to second language acquisition (3)
- A\&HL 4088
- A\&HL 4101
- A\&HT 5360

TESOL workshops

Second language assessment (3)
Phonetics and phonology (3)
Specialized practica for
TESOL teachers - minimum of two (6)
(minimum of 3 for
1 point each).

Required courses out-of-program (3 Teachers College courses of at least 2 points each: 6 points minimum) to be chosen with advisor's approval.

Students can normally expect to complete the General M.A. Program in four semesters and one summer.

Elective courses in TESOL or Applied Linguistics: Select from a variety of courses in TESOL or Applied Linguistics (6 points), to be chosen with faculty advisor's approval.

Exit requirement: Final essay (to satisfy College requirement for integrative project).

## Master of Arts with K-12 Certification Track (38-39 points)

The TESOL K-12 Certification Program offers a 38 -point minimum Master of Arts degree in TESOL leading toward Initial New York State Teacher Certification. We currently have no professional certification program for students who already have initial certification or are teaching full-time. Students wishing to teach in a public school in another state are advised to consult the certification requirements for that state.

Required courses for Initial K-12 Certification Students:

- A\&HT 4076 TESOL methodologies for K-6 (3)
- A\&HT 4171 TESOL methodologies for 7-12 (3)
- A\&HT 4185 Pedagogical approaches in the content areas for teachers of K-12 ESL (3)
- A\&HT 5205 Fieldwork in TESOL (1 semester, K-6; 1 semester, 7-12) (1 point each)
- A\&HT 4776 Supervised student teaching in TESOL: K-6 (3)
- A\&HT 4777 Supervised student teaching in TESOL: 7-12 (3)
- A\&HL 4085 Pedagogical English grammar (3)
- A\&HL 4101 Phonetics and phonology (3)
- A\&HL 4087 Introduction to second language acquisition (3)
- A\&HL 4088 Second language assessment (3)
Three TESOL workshops (minimum of 3 for $0-1$ point each).

Required courses outside the program (6-9 points):

- A course in Special Education (2-3)
- A course in Bilingual Education (or Foundations of Education/Urban Education) (2-3)
- An elective breadth course in consultation with a faculty advisor (2-3)
- TESOL and Applied Linguistics elective.

This requires a faculty advisor's approval (3)
Students can normally expect to complete the TESOL K-12 Certification M.A. Program in four semesters and one summer term.

## Master of Education (60 points)

The TESOL Program offers a Master of Education (Ed.M.), requiring a minimum of 60 points of graduate study. The Ed.M. involves in-depth study in one or more areas of TESOL. The Ed.M. is designed to complement former professional training at the M.A. level, and it sometimes serves as initial preparation for entering the doctoral program. Students who did not receive an M.A. in TESOL from Teachers College will be expected to complete specified required courses (see program sheets), from the TESOL M.A. in addition to their program of study. Exemptions based on prior coursework or their equivalent from another program must be approved by the professor teaching the course and the faculty advisor.

Required courses (12 points):

- A\&HL 4001 Sociolinguistics and education
- A\&HL 4104 Discourse analysis (or A\&HL 4105, Conversation analysis, or A\&HL 4106, Text and Textuality)
- A\&HL 5575 Research literacy in applied linguistics and TESOL

Breadth requirement ( $6-9$ points): Those students who do not already have a degree from Teachers College must take three courses of at least 2 points each from outside the department with an advisor's approved.

At least one out-of-program course must be:

- C\&T 5502 Introduction to qualitative research in curriculum and teaching (2-3)
- HUDM 4050 Introduction to
- HUDM 4122 $\begin{array}{ll} & \text { measurement (2-3) } \\ \text { Probability and statistical }\end{array}$ inference (3)
- ITSF 4092 Qualitative research and evaluation in international education (3)
- ITSF 5000 Methods of inquiry: Ethnography and participant observation (or ITSF 5001 or 5002) (3)
- ORLJ 4009 Understanding behavioral research (3)
- HUDM 5122 Applied Regression Analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6051-2 Psychometric theory I and II (3)
- HUDM 6055 Latent structure analysis (3)
- HUDM 6122 Multivariate analysis I (3)
- One of the qualitative research methods courses offered at the college (To be chosen with faculty advisor's approval).

Electives in TESOL or Applied Linguistics (9): To be chosen with an advisor's approval.

All Ed.M. students must complete an Ed.M. project, written on a research topic arising from their course-related interests and subject to approval by their faculty advisor.

## Doctor of Education (90 points)

The TESOL Program offers an Ed.D. in TESOL requiring a minimum of 90 points of graduate study. The Ed.D. involves sustained and in-depth study in an area of specialization in TESOL and is designed for students wishing to pursue empirical research in one of the following areas: language teaching methodology, language in the content areas, language teacher education, second language acquisition, second language assessment, second language literacy, second language classroom interaction, and language program evaluation. Students who did not receive an M.A. or Ed.M. in TESOL from Teachers College will be expected to have completed all the required courses, or their equivalent, from the TESOL Ed.M.

Doctoral students have three types of requirements: concentration requirements, research methods requirements, and doctoral preparation requirements.

Concentration Requirement:
Students are required to take a minimum number of points in their concentrations. The exact courses should be decided in consultation with their advisor.

Research Requirements (12 points):
To ensure that students have the skills to do scholarly research in their area of concentration, they are required to take a minimum of 12 points in research methods, statistics and measurement. Also, depending on the type of dissertation (see research methods, measurement or statistics courses from the Ed.M.) being written, students may be asked to take additional courses in these areas. The following elective research preparation courses should be taken in consultation with the doctoral advisor:

Required Research Methods Courses:

- C\&T 5502 Introduction to qualitative research in curriculum and teaching (2-3)
- HUDM 4050 Introduction to measure-
ment (2-3)
- ORLJ 4009 Understanding behavioral research (3)
- HUDM 4122 Probability and statistical
inference (3)
- ITSF 4092 Qualitative research and evaluation in international education (3)
- ITSF 5000 Methods of inquiry: Ethnography and participant observation (or ITSF 5001 or 5002) (3)
- HUDM 5122 Applied Regression Analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6051-2 Psychometric theory I and II (3)
- HUDM 6055 Latent structure analysis (3)
- HUDM 6122 Multivariate analysis I (3)
- One of the qualitative research methods courses offered at the college (To be chosen with faculty advisor's approval). Electives in TESOL or Applied Linguistics (9): To be chosen with an advisor's approval.

In order to progress through these stages, doctoral students are required to take a sequence of doctoral seminars at the $5500,6500,7500$, and 8900 levels. Students begin to take these courses when they have reached approximately 45-50 points in the program, and after they have been taking courses at Teachers College for a minimum of one year. After that, doctoral students are required to register for and attend doctoral seminar every semester.

Doctoral students are required to demonstrate research preparedness in a substantive area by passing the research paper at the 5500 level, the certification exam at the 6500 level, and the certification paper at the 6500 level. Then, as evidence that they are able to carry out original research under the guidance of a doctoral committee, they must write a dissertation prospectus at the 7500 level as a part of the dissertation seminar, and complete a doctoral dissertation while continuously registered for dissertation advisement at the 8900 level.

To prepare for these requirements, students will need to take one or more of the seminars in consultation with an academic advisor. These seminars occur at the $5500,6500,7500$ and 8900 levels. All of these seminars are offered each semester. To determine which seminar to register for, consult an academic advisor.

| - A\&HL 5501/ | Research paper in applied |
| :---: | :--- |
| A\&HT5505/ | linguistics (1-3 each course) |
| A\&HT5507 | or |

- A\&HL 6501/

A\&HT6505/
A\&HT6507

- A\&HL 7501/

A\&HT7505/
A\&HT7507

- A\&HT 8905 Dissertation advisement: TESOL (0)

Doctoral students should consult the Office of Doctoral Studies to be certain of complying with the latest procedures, deadlines, and documents.

## TESOL Teaching Residents Program

An additional M.A. program in TESOL leading to TESOL K-12 New York State Initial Certification is through the Teaching Residents at Teachers College program www.tc.edu/teachingresidents.

This degree option is restricted to students who do not have previous teaching certification in TESOL and who have been admitted to the Teaching Residents at Teachers College program.

Students in this program complete the core TESOL requirements as well as the out-of-program requirements specific to the Teacher Residency program, which focus on middle and high school teaching. Teacher Residents are required to take intensive summer courses, participate in an ongoing integrating seminar, and engage in a full school year teaching residency in a high-need New York City middle or high school. Upon completion of this program, Teacher Residents are required to teach in a high need New York City school for three additional years. Please refer to Teaching Residents at Teachers College.

COURSES: ( ${ }^{*}=$ course open to non-majors)

## General Courses

A\&HT 4000. Special topics in TESOL (1-6) Faculty. Provides an in-depth examination of special topics of current theoretical or pedagogical concern in the field of second or foreign language education. Topics may vary from term to term. This course may be repeated for credit with change of topic. Special fee: \$20

## A\&HT 4076. TESOL methodologies

 for K-6 (3)Faculty. Introduction to activities, materials, and principles particularly suited to students in elementary schools. Special fee: $\$ 20$.
*A\&HT 4077. TESOL classroom practices (3)

Dr. Fuchs. Introduction to the major language teaching approaches that have been influential in the 20th century. Special fee: $\$ 20$.
*A\&HT 4078. TESOL materials (3)
Faculty. Practice in designing, developing, and evaluating ESL or EFL materials used for students in different settings. Special fee: $\$ 20$.
*A\&HT 4080. Teaching in linguistically diverse classrooms (3)
Faculty. Supports teachers in mainstream classrooms, grades 5-12, in building a knowledge base and a repertoire of instructional strategies that will enhance the learning of language-minority students. Special fee: $\$ 20$.

## A\&HT 4086. Language classroom

 observation (3)Faculty. Introduction to the systematic observation of teaching in diverse contexts. Special fee: $\$ 20$.
*A\&HT 4089. Teaching writing to ESL students (3)
Faculty. An introduction to the theory and practice of teaching writing to ESL and EFL students in a wide range of contexts. Special fee: $\$ 20$.

## A\&HT 4171. TESOL methodologies

 for 7-12 (3)Professor Kieffer. Teaching ESL to secondary students, stressing content area ESL and second language literacy. Special fee: $\$ 20$.

A\&HL 4185. Pedagogical approaches in the content areas for teachers of K-12 ESL (3) Professor Kieffer. This course examines subject matter education for ESL students in the K-12 setting. Students investigate "best practices" within the mainstream setting with a view to helping ESL students gain access to core subject matter knowledge. Special fee: $\$ 20$.
*A\&HT 4500. Advanced English language study (1-2)
Faculty. Developmental ESL for non-native speakers of English who wish to improve their academic writing and speaking skills; emphasis on writing research papers or giving oral presentations in graduate seminars or other professional venues. Topics and emphasis change each term. Course may be taken more than once. Limit 1 point toward TESOL or Applied Linguistics degree. Special fee: $\$ 20$.

## A\&HT 5000. Advanced topics in TESOL

 (1-6)Faculty. Provides an in-depth examination of research of current theoretical or pedagogical concerns in the field of second or foreign language education. Emphasis will be on the collection and analysis of data related to the special topic. Topics may vary from term to term. This course may be repeated for credit with change of topic.

A\&HT 5087. Second language acquisition in the classroom (3)
Professor Han. This course provides an interface between second language acquisition (SLA) theories and classroom practices through: (a) exploring the practical implications of SLA research for second language teaching, and (b) offering an arena for critical reflections on past and current teaching practices. Special fee: $\$ 20$.

A\&HT 5519. Instructed second language acquisition and assessment (3)
Professor Purpura. Prerequisite: A\&HL 4088. Examines how teaching, learning and assessment of grammar have been conceptualized, researched and explained in recent decades. Explores differing conceptualizations of language ability as a basis for teaching grammar under different conditions and as a basis for measuring and explaining grammatical acquisition. Special fee: $\$ 20$.

## Language Teaching Practica

The practicum courses provide guided professional practice. They are offered in three tiers, starting with the novice practicum, progressing to the integrated skills practicum, and culminating in the specialized practicum, the goal being to provide gradient learning and practice opportunities leading to increased awareness and development of sophisticated teaching skills. Students who are enrolled in the M.A. TESOL General Track are required to take two to three of the practica, depending on whether they have under or over two years of full-time teaching experience prior to matriculation, and to take the courses in sequence.

The practica include: 18-20 hours of student teaching, 6 to 10 hours per week for teaching preparation, 1 hour per week for observations, and 2 hours per week for the related seminar.

A\&HT 4776. Supervised student teaching in TESOL: K-6 (3)
Professor Hruska. Permission of instructor required. A supervised teaching experience for M.A. students who are interested in working toward a New York State teaching certificate in TESOL K-12 (Kindergarden to 12th grade) and who have not taught ESL in grades K-12 for at least two years, full time. During the terms of practice teaching, students are not permitted to hold full time jobs. Special fee: $\$ 20$.

A\&HT 4777. Supervised student teaching in TESOL: 7-12 (3)
Faculty. Permission of instructor required. A supervised teaching experience for M.A. students who are interested in working toward a New York State teaching certificate in TESOL K-12 (Kindergarden to 12th grade) and who have not taught ESL in grades K-12. During the terms of practice teaching, students are not permitted to hold full time jobs. Special fee: $\$ 20$.

A\&HT 5360-A\&HT 5379 and A\&HT 5381. Specialized practica for ESL teachers (3 each course) Faculty/staff. Permission of instructor required. These practica offer a teaching experience in TC's Community Language Program (CLP). Special fee: $\$ 10$.

## Workshops

Faculty. Not all workshops are offered each term or year. Selections are offered according to student interest and staff availability.
Workshops usually meet over 1 or 2 weekends.
A\&HT 4160-4180. TESOL methodologies (Noncredit, 0 or 1 point each)

- A\&HT 4160. The silent way
- A\&HT 4164. Language for specific purposes
- A\&HT 4165. English for academic purposes
- A\&HT 4166. Computer-assisted language learning
- A\&HT 4167. Media-assisted language learning
- A\&HT 4168. Culture and second language teaching
- A\&HT 4169. Literature in the ESOL class
- A\&HT 4172. Teaching English in EFL
- A\&HT 4173. Task-based and functional approaches to language learning
- A\&HT 4174. Teaching second language grammar
- A\&HT 4175. Facilitating autonomy in language learning
- A\&HT 4176. Teaching listening
- A\&HT 4177. Teaching speaking
- A\&HT 4178. Teaching reading
- A\&HT 4179. Teaching writing
- A\&HT 4180. Trends in TESOL methodologies

A\&HT 4817-A\&HT 4819. Experiences in learning another language (Noncredit, 0 or 1 point each)
Faculty. A series of workshops designed to provide language teachers with an opportunity to learn a foreign language through a brief immersion experience, so that they can reflect upon the experience from a learner's perspective. Methods vary from term to term. These workshops may be taken more than once pending advisor's approval.

A\&HT 4860-A\&HT 4880. Specialized TESOL materials (0-1)
Faculty. Not all workshops are offered each term or year. Workshops are offered according to student interest and staff availability. Workshops usually meet over 1 or 2 weekends.

## Independent Research, Fieldwork and Internships

A\&HT 4905. Research and independent study in TESOL (1-6)
Faculty. Permission of instructor required. Research under the direction of a faculty member. Students work individually or with others. Course may be taken more than once.

A\&HT 5205. Fieldwork in TESOL (1-3) Faculty. Permission of instructor required. Opportunity for qualified students, individually or in small groups, to develop and pursue projects, in consultation with an advisor, in schools, communities, and other field settings. Course may be taken more than once.

A\&HT 6205. Advanced fieldwork in TESOL (1-6)
Faculty. Permission of instructor required. Opportunity for qualified students, individually or in small groups, to develop and pursue projects, in consultation with an advisor, in schools, communities, and other field settings. Course may be taken more than once.

## Doctoral Preparation

A\&HT 5505. Research paper: TESOL (1-3 each course)

A\&HL 5507. Research paper: Applied linguistics and TESOL (1-3 each course)
A\&HL 6507. Doctoral seminar: Applied linguistics and TESOL (1-3 each course)
A\&HL 7507. Dissertation seminar: Applied linguistics and TESOL (1-3 each course)
A\&HT 6505. Doctoral seminar: TESOL (1-3 each course)
A\&HT 7505. Dissertation seminar: TESOL (1-3 each course)

A\&HT 8905. Dissertation advisement: TESOL (0)

See also:
A\&HL 4001. Sociolinguistics and education (3)

A\&HL 4003. Schools of linguistics (3)
A\&HL 4005. Semantic systems and the lexicon (3)
A\&HL 4014. Gender, language, and education (3)
A\&HL 4085. Pedagogical English grammar (3)
A\&HL 4087. Introduction to second language acquisition (3)
A\&HL 4088. Second language assessment
(3)

A\&HL 4101. Phonetics and phonology (3)
A\&HL 4104. Discourse analysis (3)
A\&HL 4106. Text and textuality (3)
A\&HL 4901. Research and independent study: Applied linguistics (1-6)
A\&HL 5085. Advanced English syntax (3)
A\&HL 5201. Fieldwork in applied linguistics (1-6)
A\&HL 5501. Research paper in applied linguistics (1-3)

A\&HL 5512. History of language testing research (3)

A\&HL 5515. Advanced topics in applied linguistics I (3)

A\&HL 5516. Advanced topics in applied linguistics II (3)

A\&HL 5519. Instructed second language acquisition and assessment (3)
A\&HL 5575. Research literacy in applied linguistics and TESOL (3)

A\&HL 5581. Psycholinguistics and second language acquisition (1-3)

A\&HL 5582. Sociolinguistics and second language acquisition (1-3)
A\&HL 5586. Interlanguage phonology (1-3)
A\&HL 5588. Trends in second language acquisition research (3)
A\&HL 6087. Advanced second language acquisition (3)
A\&HL 6201. Advanced fieldwork in applied linguistics and TESOL (1-6)

A\&HL 6501. Doctoral seminar in applied linguistics (1-3 each course)

A\&HL 6587. Seminar in second language acquisition: Acquisitional and cross-cultural pragmatics (3)

See also:
For additional acceptable courses in teaching methods and practica, see the listing under Bilingual/Bicultural Education in the Department of International and Transcultural Studies.

## TEACHING OF ENGLISH TO SPEAKERS OF OTHER LANGUAGES - JAPAN

Interim Program Director:
Dr. William Snyder
Program Office: (81)-3-3221-9771 (Tokyo)
Email: snyder@exchange.tc.columbia.edu
Website: www.tc-japan.edu

## Degree Offered:

## TEACHING OF ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL-JAPAN) (TSLJ)

Master of Arts (M.A.)

## Program Description:

This program is no longer accepting applications. The program offers an off-campus M.A. in TESOL in Tokyo designed specifically for teachers of English in Japan. As an extension of the New York TESOL program, this program provides opportunities for current teachers of English to earn an M.A. while teaching part or full-time. This program suits teachers of English in the Japanese school system (elementary, junior high and high schools), as well as those working in the commercial sector, or those in Japan on such programs as the Japan Exchange Teaching (JET) program. Students attend courses, workshops and practica offered on Saturdays and Sundays throughout the year, and the class times are organized so that working teachers are able to attend on the weekends. Students may request to transfer between the New York and Japan TESOL programs subject to approval. All offerings are in English.


# Biobehavioral Sciences 

## PROGRAMS:

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MOVEMENT SCIENCE AND
EDUCATION52
Applied Physiology
Motor Learning and Control
Physical Education
Kinesiology (Ph.D. only)
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## CURRICULUM AND TEACHING IN PHYSICAL EDUCATION <br> 59

NEUROSCIENCE ..... 61Neuroscience and Education
SPEECH AND LANGUAGE
PATHOLOGY62


## DEPARTMENTAL MISSION:

The Department of Biobehavioral Sciences offers programs that derive educational and clinical applications from an understanding of the biological processes underlying human communication, movement, and their disorders. An understanding of the normal biobehavioral processes is applied to clinical practice. The scientific knowledge obtained from studying each of these specialized fields is used to enhance the educational, adaptive, and communicative capabilities of individuals with normal and impaired abilities across the lifespan.

Graduates of our master's programs assume professional roles in educational, health-related, and community agency settings as speech-language pathologists, exercise physiologists, fitness trainers, cardiac rehabilitation therapists, occupational therapists, and physical therapists. As these professionals often work in interdisciplinary teams, the department facilitates opportunities for students to interact across professional boundaries.

Our doctoral graduates are prepared for university faculty positions, administrative positions in field-based settings, and may also pursue careers in research.

The department maintains clinics and laboratories to support the teaching and research components of the programs. These facilities include the Edward D. Mysak Clinic for Communication Disorders, as well as laboratories in applied physiology, motor learning, kinematics, language and cognition, and adaptive communication technologies.

The master's degree program in Speech-Language Pathology is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA).

## FACULTY:

## PROFESSORS:

Andrew M. Gordon
(Movement Science and Education:
Motor Learning and Control,
Neuroscience and Education)
John H. Saxman
(Speech-Language Pathology,
Neuroscience and Education)
Stephen Silverman
(Movement Science and Education:
Physical Education)

## ADJUNCT PROFESSORS:

Thomas Murry
(Speech-Language Pathology,
Neuroscience and Education) Lorraine Ramig
(Speech-Language Pathology,
Neuroscience and Education)
Jaclyn Spitzer
(Audiology)
Ronald Tikofsky
(Speech-Language Pathology,
Neuroscience and Education)
ASSOCIATE PROFESSORS:
Laura Azzarito
(Movement Science and Education:
Physical Education)

Karen Froud
(Speech-Language Pathology,
Neuroscience and Education)
Carol Ewing Garber
(Movement Science and Education:
Applied Physiology)
Peter Gordon
(Speech-Language Pathology,
Neuroscience and Education)
Honor O'Malley
(Audiology, Neuroscience and Education)

## ADJUNCT ASSOCIATE PROFESSORS:

Frederic Albert
(Movement Science and Education:
Motor Learning and Control)
Matthew Bartels
(Movement Science and Education:
Applied Physiology)
Christine Chen
(Motor Learning and Control)
Sarah Doolittle
(Movement Science and Education:
Physical Education)
Glen Gillen
(Movement Science and Education) Sharon A. Gutman
(Movement Science and Education)

Ya Ching Hung
(Movement Science and Education:
Motor Learning and Control)
Terry Kaminski
(Movement Science and Education:
Motor Learning and Control)
Janet Falk-Kessler
(Movement Science and Education)
Andrew McDonough
(Movement Science and Education:
Motor Learning and Control)
Jeffrey Melendez
(Movement Science: Physical Education)
Justine Joan Sheppard
(Speech-Language Pathology,
Neuroscience and Education)
Prithwi Raj Subramaniam
(Movement Science and Education:
Physical Education)
Carol Tompkins
(Speech-Language Pathology)
Karin B. Wexler
(Speech-Language Pathology)

## ASSISTANT PROFESSORS:

Erika Levy
(Speech-Language Pathology,
Neuroscience and Education)
Georgia Malandraki
(Speech-Language Pathology)
Tara McIsaac
(Movement Science and Education:
Motor Leaning and Control)
ADJUNCT ASSISTANT PROFESSORS:
Frederick DiMenna
(Movement Science and Education:
Applied Physiology)
Ken Hoyte
(Neuroscience and Education)
Carol M. Kaufman
(Speech-Language Pathology)
Ashwini K. Rao
(Movement Science and Education:
Motor Learning and Control)
James Rose
(Movement Science and Education:
Physical Education)
James Sumowski
(Neuroscience and Education)

## FULL-TIME LECTURERS:

Catherine Crowley
(Senior Lecturer, Speech-Language Pathology)
Jo Ann Nicholas
(Speech-Language Pathology)
Jennifer Rasmussen
(Movement Science and Education:
Physical Education)
Kathleen Youse
(Director, Edward D. Mysak Clinic for Communication Disorders)

## INSTRUCTORS:

Pamela Bernstein
(Movement Science and Education:
Motor Learning and Control)

Cynthia S. Cohen
(Speech-Language Pathology)
Stephanie Downey
(Speech-Language Pathology)
Rebecca Eisenberg
(Speech-Language Pathology)
Racine Emmons
(Movement Science and Education:
Applied Physiology)
Nancy Freedman
(Speech-Language Pathology)
Paul Gallo
(Movement Science: Applied Physiology)
Motor Learning and Control)
Connie Kokkalakis
(Speech-Language Pathology)
Shirit Kamil Rosenberg
(Movement Science and Education:
Applied Physiology)
Amerigo Rossuello
(Movement Science and Education:
Applied Physiology)
Michael Soupios
(Movement Science and Education:
Motor Learning and Control)
Chaviva Wolff
(Movement Science and Education:
Motor Learning and Control)

## CLINICAL INSTRUCTORS:

Rebecca Alva
(Speech-Language Pathology)
Miriam Baigorri (Speech-Language
Pathology)
Maria Blanco
(Speech-Language Pathology)
Vanessa D'Auria
(Speech-Language Pathology)
Adrienne Frohlich
(Speech-Language Pathology)
Bernadine Gagnon
(Chief Clinical Supervisor, Edward D. Mysak Clinic for Communication Disorders)
Jean Lee
(Speech-Language Pathology)
Erika Ozkan
(Speech-Language Pathology)
Emily Perdios
(Speech-Language Pathology)
Emily Roblee
(Speech-Language Pathology)
Marci Silver
(Speech-Language Pathology)
Lisa Sommer
(Speech-Language Pathology)
Elise Wagner
(Assistant Director, Edward D. Mysak Clinic for Communication Disorders)

For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit www.tc.edu/faculty.

## Movement Science and Education

The Movement Science and Education area of study includes the following sub-specialties: Applied Physiology; Motor Learning and Control; Physical Education; Curriculum and Teaching in Physical Education; and Kinesiology.

## APPLIED PHYSIOLOGY

Program Coordinator:
Professor Carol Ewing Garber
Program Office:
(212) 678-3891
Email
ceg2140@columbia.edu

Website: www.tc.edu/bbs/Movement

## Degrees Offered:

APPLIED PHYSIOLOGY (APHY)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
See also: The interdepartmental program
in Applied Physiology and Nutrition in the Department of Health and Behavior Studies.

## MOTOR LEARNING AND CONTROL

## Program Coordinator:

Professor Andrew Gordon
Program Office: (212) 678-3325
Email: agordona@tc.edu

## Degrees Offered:

MOTOR LEARNING AND CONTROL (MTLG)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## CURRICULUM AND <br> TEACHING IN PHYSICAL EDUCATION

Program Coordinator:
Professor Stephen Silverman
Email: ss928@columbia.edu

## Degrees Offered:

CURRICULUM AND TEACHING
IN PHYSICAL EDUCATION (PECT)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## PHYSICAL EDUCATION

Program Coordinator:
Professor Stephen Silverman
Program Office: (212) 678-3324
Email:
ss928@columbia.edu

## Degrees Offered:

PHYSICAL EDUCATION (PHED)
Master of Arts (M.A.)
PHYSICAL EDUCATION.
INITIAL CERTIFICATION (PHED-INIT)
Master of Arts (M.A.)
PHYSICAL EDUCATION.
PROFESSIONAL CERTIFICATION (PHED-PROF)
Master of Arts (M.A.)

## KINESIOLOGY

Program Coordinator:
Professor Andrew Gordon
Program Office: (212) 678-3325
Email: msnsprogram@tc.edu

## Degree Offered:

## KINESIOLOGY (KINE)

Doctor of Philosophy (Ph.D.)
The Ph.D. program requires a full-time commitment to graduate studies. This entails engaging in coursework and research activity related to the doctoral degree at least five days per week. Ph.D. students should not expect to hold outside employment during their studies. This commitment will ensure that advisement, research activities, and course work can be completed to the degree of competence that is expected in a researchintensive degree program. The degree of Doctor of Philosophy emphasizes research and intensive specialization in a field of scholarship. Under an Agreement with Columbia University, Teachers College offers programs leading to the Ph.D. degree in designated fields in which the Graduate School of Arts and Sciences of the University does not offer programs, namely in education, including education in the substantive disciplines and certain applied areas of psychology and physiology. The minimum requirements for the degree are: satisfactory completion of a planned program of 75 graduate points beyond the Baccalaureate; submission of a statement of total program indicating periods of intensive study subsequent to the first year of graduate study which accompanies the program plan of study; satisfactory performance on foreign language examinations and on a departmental Certification Examination; and preparation and defense of a research dissertation. In addition, doctoral students in Kinesiology are expected to complete a sequence of three research studies, or the equivalent, to meet degree requirements. Relevant courses com-
pleted in other recognized graduate schools to a maximum of 30 points, or 45 points if completed in another Faculty of Columbia University, may be accepted toward the minimum point requirement for the degree. Each degree candidate must satisfy departmental requirements for the award of the Ed.M. degree prior to continuance in the Ph.D. program. These degree requirements are specified in the Requirements for the Degree of Doctor of Philosophy Bulletin, obtainable from the Office of Doctoral Studies. Each student and his or her advisor develop a program that will help the student meet his or her goals and successfully complete the series of studies that meets the research requirements of the program.

For more information about special application requirements, program description and degree program requirements for the Ph.D. program in Kinesiology, contact Professor Gordon at msnsprogram@tc.edu

## Movement Sciences <br> Program Description:

There are three specialties in Movement Sciences:

The Applied Physiology concentration focuses on the study of the physiological effects of acute and chronic exercise, how exercise influences health, and on the promotion of physical activity in community, clinical and public health settings. The effects of exercise training on physiological processes, neuromuscular and biomechanical function, health, and physical well-being are emphasized. Students can apply their academic work to jobs that involve exercise testing and training, including programs designed to improve health and physical fitness in healthy individuals and in people with or at risk for chronic illness or disability, and in community, clinical, research, and public health settings.

Motor Learning and Control study focuses on the behavioral, biomechanical, and neural bases of development, acquisition, and performance of functional movement skills. Acquisition of skill is examined over the lifespan in typically developing and impaired individuals. Movement analysis is used to elucidate the neuromotor control processes underlying skilled performance in everyday functional behaviors, sport, and dance. The teacher or therapist's role in facilitating skill learning and performance is emphasized.

Health and physical education has a long and distinguished history at Teachers College. Teachers College offered one of the first graduate degrees in health and physical education and continues to offer a wide array of opportunities for graduate study. In addition to courses
in curriculum and teaching in physical education, there are a variety of other courses in the movement science, health studies, curriculum and teaching, and other areas that provide students with many opportunities for course options. All programs are designed to allow flexibility in program planning.

Each of these specialties has five components: 1. Substantive study of theory and research as embodied in lecture and laboratory courses.
2. Development of clinical or educational skills in laboratory and fieldwork courses.
3. Research training to enable students to read and interpret original research and to carry out educational, clinical, or laboratory research. 4. Seminars to discuss theory and research, identification of research problems, and clini$\mathrm{cal} / \mathrm{educational}$ applications.
5. Elective courses to meet specific student needs which may be taken throughout the College and University in such areas as Anatomy, Biology, Business, Chemistry, Computer Science, Health Education, Higher and Adult Education, Neurosciences, Nutrition, Physiology, Psychology, Public Health, and Science Education. A list of recommended elective and related courses is available to students in the Movement Science office. At least 2 courses (for a total of at least 6 points) outside of the program area are required.

## Special Application <br> Requirements/Information:

While students have come from a variety of fields, the following backgrounds are most appropriate: movement sciences, dance, exercise science, physical therapy, occupational therapy, physical education, athletic training, biology, nutrition, nursing, and psychology. Students with strong academic records, who have deficiencies in their science backgrounds, may be admitted with the understanding that these deficiencies will be remedied with appropriate courses. When possible, it is strongly recommended that prospective students communicate with an academic advisor to discuss program plans prior to admission. Admissions are on a rolling basis and applicants can be accepted in any semester. However, for greatest opportunity for financial support, applicants are encouraged to apply by early January for Fall admissions.

Interviews are required for applicants planning to pursue the doctoral program (these may be done by conference call when extensive travel is necessary). Students intending to pursue doctoral study are strongly encouraged to make an appointment to visit the College for at least one day to meet with faculty and doctoral students, to audit a course or seminar, and to become acquainted with research areas and resources.

## Degree Requirements for

## Programs in Movement Science:

Applied Physiology and Motor Learning and Control

## Master's Degree Programs

For the M.A. and Ed.M. programs with specialization in Movement Science and Education, students have two options. They may specialize in one of the three areas offered within Movement Science (Applied Physiology, Motor Learning and Control, Physical Education) or in consultation with an advisor, they may arrange a flexibly-designed program of study cutting across specialization in the movement sciences that will meet their professional needs and academic interests.

## Master of Arts

The M.A. program emphasizes bridging between the movement sciences and clinical or education practice. The objective is to develop a comprehensive and coherent view of theory and research that can be applied to practice within the student's professional field. The program requires 32 points of study or comprehensive examination. Students are expected to make satisfactory progress toward the completion of degree requirements. Program faculty will annually review each student's progress. Please note that satisfactory performance is defined at a minimum as no incomplete grades, and no BBSR or BBS courses in which the grade earned is lower than B-.

A final project is required for the M.A. and may involve one of four options:

1. A scholarly review of research and theory within a topical area drawing application to educational or clinical practice.
2. A basic or applied research.
3. An educational project including the development of an assessment instrument/method for clinical or educational practice or a presentation for a continuing education program.
4. An examination covering all core movement science courses, core specialization courses, research methods, and substantive study in movement sciences.

For initial advisement and approval of M.A. projects, students must consult with their academic advisor. The M.A. program can be completed in 12-18 months of full-time study or two to three years of part-time study (depending on the student's other responsibilities).

Specific requirements for the Motor Learning and Control concentration include:

- BBS 5060 Neuromuscular responses and adaptation to exercise (2)
- BBS 5068
- BBSR 5582
- BBSR 4060
- BBSR 4161
- BBSR 4050

Brain and behavior I: Communication in the nervous system (1-2) Research design in the movement sciences (3) Motor learning (3)* Motor learning laboratory (2, co-requisite BBSR 4060) Biomechanical analysis of human movement (3)

- Substantive study: minimally 6 points in movement sciences (BBSR courses including offerings in physical education) beyond the above listed courses.
- Laboratory courses: one course of minimally 2-3 points in movement sciences (BBSR course).
- Seminars, tutorials or conferences: minimally $2-3$ points in movement sciences (BBSR courses).
- Electives: minimally one additional non-BBSR course outside the program in Movement Sciences and Education (course at Teachers College for at least 2 points) besides BBS 5060 and BBS 5068.
- Individual program: minimally 6 points in movement sciences (additional BBSR courses in substantive, laboratory, fieldwork or seminar study) and/or related areas outside of the program (including graduate courses at Columbia University).


## BBSR 5504. Research training in motor

 learning (2)Students will enroll in this competency based course during their last year of study to immerse themselves in current research in motor learning and control, as well as receive advisement of their final project. Note that if all coursework is complete but the student has not yet completed the final project, students must continue to enroll for 1 point (above and beyond the 32 points) each semester until the project is complete.

For the Applied Physiology Concentration, specific requirements (and points) include:

Required Core Courses (minimum 15 points):

- BBSR 4095 Applied physiology I (3)
- BBSR 4195 Applied physiology laboratory I (3)
- BBSR 5194 Applied physiology
laboratory II (3)
- BBS 5060 Neuromuscular responses and adaptation to exercise (2)
- BBS 5068
- BBSR 5582 Research design in the movement sciences (3)

Substantive Study in Movement Sciences (minimum 6 points). These may include, but are not limited to:

- BBSR 5095 Exercise and health (3)
- BBSR 5596 Topics in applied
physiology (3)
- BBSR 4060 Motor learning (2-3)
- BBSR 4005 Applied anatomy and biomechanics (3)
- BBSR 4055 Neuromotor processes
- BBSR 5028 Motor development
- BBS 5069
- BBSQ 4043
- BBSR 5057
- BBSR 4070
- BBSR 5195
- BBSR 4900
- BBSR 5595

Brain and behavior II:
Perception, emotion, memory and cognition (1-2)
The human nervous system
Movement disorders Introduction to the psychosocial study of human movement (2-3)
Advanced applied physiology laboratory (3)
Research and independent study in movement science and education (1-3)
Research seminar in applied physiology (1)

Elective Courses outside of Movement Sciences/Biobehavioral Sciences (a minimum of 2 courses for a total of 6 or more points).
Electives may include, but are not limited to:

- MSTC 4054. Human anatomy and physiology (2-3)
- HBSS 4100 Introduction to health
- HBSS 4102
- HBSS 4118
- HBSS 5110
- HBSS 4114
- HBSS 4115
- HBSS 5111
- HBSS 4140
- HBSS 4122
- HBSV 4000
- HBSS 6145
- HBSV 4010
- HBSV 4011
- HBSV 4150.
- HUDK 4015


## education (3)

Principles of epidemiology
in health promotion (3)
Relapse prevention for problem behaviors (3)
Determinants of health behavior (3)
Health promotion for multicultural populations (3) Health promotion for aging adults (3) Planning health education programs (3) Developing workplace health promotion programs (3)
Women's health (3) Introduction to nutrition: Facts, fallacies, and trends (3) trends (3) Health psychology (3) Food, nutrition, and behavior (3)
-
Women and weigh, eating problems and body image (2) Sports nutrition (3)

- HUDK 5023
- HUDM 4120
- HUDM 4122 Probability and statistical
- MSTC $4152 \quad$ inference (3) genetics (2-3)
- MSTC 5052 Biochemistry and cell biology (2-4)
- ORLD 4051 How adults learn (3)
- ORLD 4053 Facilitating adult learning (3)
- ORLA 5017 Groups and interpersonal behavior (2-6)
- ORLA 4071 The leadership of private schools and non-profit organizations (3)


## Master of Education

The Ed.M. program provides for advanced study in the movement sciences and for individually designed study to meet the student's professional needs and interests. The following program description concentrates on describing course requirements. It is important to recognize that these are only the more formal and identifiable features of the program. A minimum of 60 points of relevant graduate coursework is required for the degree, 30 points of which must be completed at Teachers College. Transfer credit from another university is awarded at the discretion of the faculty advisor. A maximum of 30 points completed outside of Teachers College may be transferred. All coursework taken in fulfillment of the Ed.M. degree requirements may subsequently be applied towards more advanced degrees (Ed.D., Ph.D.). Students can focus on: (a) preparation as a "scholar of practice" who is able to translate research and theory into appropriate clinical or educational strategies; (b) preparation as a clinical instructor, clinical or educational supervisor, or applied investigator; or (c) preparation for study towards the doctoral degree.

Students are expected to make satisfactory progress toward the completion of degree requirements. Program faculty will annually review each student's progress. Please note that satisfactory performance is defined at a minimum as no incomplete grades, and no BBSR or BBS courses in which the grade earned is lower than B-. For Ed.M. students satisfactory pro-gress in research/special project work is also expected.

All Ed.M. students must complete a final, culminating project involving either: (a) an applied research study, which can focus on clinical or educational issues, or (b) a laboratory research study. Students intending to con-
tinue study towards the doctoral degree should arrange their Ed.M. program to include core courses required for doctoral specialization in Applied Physiology or in Motor Learning and Control.

For the Master of Education program, specific requirements for courses, or equivalents transferred from prior graduate study, include con-centration-specific core course requirements for the M.A. degree, at least 6 points in research methods and statistics, substantive study in movement sciences (minimum 15 points), research seminars or tutorials (minimum 5 points), and elective courses, with at least two courses (minimum 4 points) outside of the BBS department. To meet the College breadth requirement for graduation, students must have a total of three courses (for at least 6 or more total points) outside of the Movement Sciences Program. Students can meet the breadth requirement through electives or core course requirements, so long as the courses taken to meet those requirements fall outside the program.

Research training students will enroll in either research training in motor learning (BBSR 5504) or research seminar in applied physiology (BBSR 5595) for at least during their last year of study to immerse themselves in current research in their movement science concentration as well as receive advisement on their final project. Note that if all coursework is complete but the student has not completed the final project, students must continue to enroll for 1 point (above and beyond the 60 points) each semester until the project is complete.

## Doctoral Programs

In the preparation of doctoral students, the goal is to develop those competencies necessary to pursue scholarly and scientific work and to formulate strategies to enhance professional practice. Formal admission to the doctoral program is based upon level of achievement in coursework and seminars; demonstration of research competence; a research direction compatible with faculty and laboratory resources; and signs of professional promise. A list of current research projects in Applied Physiology and in Motor Learning and Control can be obtained from the secretary in the Movement Science office.

Applicants for the M.A., Ed.M. and Ed.D. degrees are reviewed on an ongoing basis throughout the academic year. However, consideration for general and diversity awards is given to those applicants who meet the early application deadline. See the Admissions section of this bulletin for details. Prior to formal admission, enrollment in up to 8 points of study as a non-matriculated student is permitted.

Applicants for the Ph.D. in Kinesiology are reviewed once a year subsequent to the December 15th application deadline.

## Special Application Requirements, Applied

 Physiology Programs: While students have come from a variety of fields, the following backgrounds are most appropriate: kinesiology, movement sciences, exercise science, physical therapy, occupational therapy, physical education, athletic training, biology, nutrition, nursing, and psychology. Students with strong academic records who have deficiencies in their science backgrounds, may be admitted on a provisional basis with the understanding that these deficiencies will be remedied with appropriate courses taken in addition to those required for the M.A. degree. It is strongly recommended that students without undergraduate coursework in anatomy and physiology (usually a two-semester sequence with laboratory) take these courses prior to entering the program. It is recommended that prospective students communicate with an academic advisor to discuss program plans prior to admission. Students are encouraged to make an appointment to visit the college to meet with faculty. If desired, it is possible to audit a class or seminar session during your visit. Applicants are reviewed on an ongoing basis throughout the academic year. Prior to formal admission, enrollment in up to 8 points of study as a nonmatriculated student is permitted.Specialization in Applied Physiology, Motor Learning and Control, or Physical Education is required for the doctoral program in these areas. Within each area of specialization, students prepare course and laboratory projects, research papers and other materials appropriate for their projected professional activities. The program requires 90 points of graduate study.

The doctoral program prepares individuals for leadership roles in the movement sciences and in the fields of physical education, nutrition, dance education and rehabilitation (occupational, physical and respiratory therapy). Graduates have assumed positions as faculty members and program directors in universities and colleges; as researchers in educational, clinical or biomedical settings; and as administrators, supervisors or consultants in clinical or educational facilities. Preparation focuses advanced study and research training within the specialization.

## Doctor of Education <br> (Applied Physiology)

The goal of the Doctor of Education with specialization in Applied Physiology is to prepare doctoral students to pursue scholarly and scientific work. Students are expected to contribute significantly to the completion of at least one comprehensive research project prior to initiation of their dissertation proposal. The skills developed during completion of this project will enable students to carry out their dissertation project independently. Students are encouraged to present the work leading up to the dissertation proposal at national meetings and to contribute to the publication of results in peer-reviewed journals. Research may be completed in the applied physiology laboratories at Teachers College or in another clinical/ research setting. If the work is completed outside of Teachers College, students are expected to demonstrate that they have contributed significantly to the completion of the required projects. All work (either at Teachers College or outside of the College) must be developed and completed in conjunction with advisement of Movement Science faculty. The preliminary work may be published prior to graduation, but the final study may only be published upon completion of the degree. All Ed.D. students are encouraged to write a grant to obtain predoctoral fellowship funding to support their research and to provide some training in grantmanship.

Students may complete the Ed.D. on a full or part-time basis. However, Ed.D. students are expected to commit themselves to their graduate studies. A minimum commitment entails engaging in research activity related to the doctoral degree three days per week (at least two weekdays). This minimum commitment will ensure that advisement, research activities and coursework can be completed in an efficient and timely fashion.

## Applied Physiology Programs Statement of

 Satisfactory Progress: Students are expected to make satisfactory progress toward the completion of degree requirements. Program faculty will annually review each student's progress. Please note that satisfactory performance in the applied physiology program is defined as no incomplete grades, and no BBSR or BBS courses in which the grade earned is lower than B-. Any student receiving eight or more points in grades of C - or lower is not permitted to continue registration at the College in any capacity and may not receive a degree or diploma. For doctoral students satisfactory progress in research/special project work is also expected. Where there are concerns about satisfactory progress, students will be informed by the program faculty. If a student is performing below expectations he/she may be required to complete additional coursework. The program will provide a plan and timeline for remediation so students know the expectation for them to continue in the program. If satisfactory progress is not maintained a student may be dismissed from the program.In the preparation of doctoral students, the goal is to develop those competencies necessary to pursue scholarly and scientific work and to formulate strategies to enhance professional practice.

The following program description concentrates on describing course requirements. It is important to recognize that these are only the more formal and identifiable features of the program. A minimum of 90 points of relevant graduate coursework is required for the degree, 45 points of which must be completed at Columbia University. Students who complete a master's degree at another university normally transfer approximately 30 points and therefore enroll for approximately 60 points of coursework at Teachers College during their doctoral program.

Research training uses an apprenticeship model. Students work closely with faculty throughout their preparation: initially as apprentices with access to considerable advisement, subsequently as collaborators, then progressing to a position as independent researchers. Typically, the dissertation research is an extension of one prior study. Often, research leading up to the dissertation is presented at national meetings or is published in professional journals.

Courses are chosen in consultation with an advisor. Previously completed graduate coursework may be substituted, as appropriate, for the recommended experiences listed below when approved by the advisor. Each student and his or her advisor develop a program that will help the student meet his or her goals and successfully complete the dissertation.

Students are required to complete a minimum of 20 points after taking the certification examination for the first time, including the points taken during the term in which that examination was taken. Students are required to be in continuous enrollment for a minimum of 3 points of Teachers College course credit. Normally this will be research seminar in applied physiology in each fall and spring term, starting with the term following successful completion of the certification examination or following the term in which the dissertation proposal was approved in a departmental hearing, whichever comes first, and continuing until all requirements for the degree are met.

The following is a list of the minimal requirements for the Ed.D. degree in applied physiology.

## Movement Sciences Core Courses (minimum

 12 points)- BBSR 4095
- BBSR 4195
- BBSR 5194
- BBS 5060
is strongly recommended that most doctoral students in applied physiology take organic chemistry and biochemistry, if they have not done so in previous study. The program of study should include at least two Teachers College courses (for at least 2 points each) in programs outside of the movement sciences (such as nutrition education, health education, and other programs).


## Doctor of Education (Motor Learning and Control)

 In the preparation of doctoral students, the goal is to develop those competencies necessary to pursue scholarly and scientific work and to formulate strategies to enhance professional practice.Research training uses an apprenticeship model. Students work closely with faculty throughout their preparation: initially as apprentices with access to considerable advisement, subsequently as collaborators, then progressing to a position as independent researchers.

Typically, the dissertation research is an extension of one or two prior studies. Often, research leading up to the dissertation is presented at national meetings or is published in professional journals.

In addition to substantive study and research preparation, students are expected to design an individual program representing their research area and professional concerns. Such preparation requires a significant commitment to graduate study. Doctoral students (and Ed.M. students planning to pursue the doctoral degree) are required to be engaged in research at least three days per week (on or off-site) and be available for advisement at least two mornings or afternoons.

For the doctoral program with specialization in Motor Learning and Control, specific course requirements (or equivalents transferred from prior graduate study) are:

- BBS 5060

Neuromuscular responses and adaptation to exercise (2)

- BBS 5068
- BBSR 4050
- BBSR 4060 Motor learning (3) Brain and behavior I: Communication in the nervous system (1-2) Biomechanical analysis of human movement (3)
- BBSR 4151 Laboratory methods in biomechanics (3)
- BBSR 4161 Motor learning laboratory (2-3)
- BBSR 5151 Introduction to the analysis of biomechanical signals, or an approved course in computer programming (3)
- BBSR 5504
movement sciences (3)
- Four courses (12 points) selected from: BBSQ 4047, BBSR 4055, BBSR 4070, BBSR 4865, MSTC 5000, BBSR 5050, BBSR 5028, BBSR 5055, BBSR 5057, BBSR 5251, BBSR 5860
- Three topical seminars (9 points) selected from: BBSR 5596, BBSR 6563, BBSR 6564, BBSR 6565
- Statistics sequence minimum (9 points):


## HUDM 4122, HUDM 5122 and

 HUDM 5123Two courses in educationally-relevant areas must also be selected from the list below or substituted with advisor permission:

- C\&T $4004 \quad$ Basic course in school
- C\&T 4052 Designing curriculum and
- C\&T $4078 \quad$ Curriculum and teaching in urban areas (3)
- C\&T 4114 Multicultural approaches to teaching young children (3)
- C\&T 4159 Teacher education programs
- C\&T 5020 The environments of school (3)
- ORLH 4010 Purposes and policies of higher education (3)
- ORLH 4011 Curriculum and instruction in higher education (3)
- ORLH 4040 The American college student (3)
- ORLH 4820 Cultural diversity training in higher education settings: Issues and concerns (3)
- ORLH 4830 Transforming the curriculum: Theory and practice (3)
- Individual program and electives (17)

Teaching Assistantships: Program faculty believe strongly in the value of assistant teaching. Teaching assistantship can provide students with valuable opportunities to learn new material, review material previously acquired and obtain teaching skills and materials. The objective of the required teaching assistantship is to provide Ed.D. students with a quality learning experience that will benefit them regardless of whether they pursue academic or nonacademic careers. Doctoral students are required to serve as a teaching assistant for one Masters level course before graduating (whether in a paid or non-paid capacity). Every effort will be made to match student preferences with available opportunities, but students should expect that they may not always receive
their first preference. Beyond this, additional teaching assistantship opportunities may be available for more advanced courses.

Graduate Study/Clinical Practice Traineeships are available for occupational and physical therapists enrolled in or admitted to degree programs in Movement Science. They are offered in collaboration with several clinical agencies located in the metropolitan New York area that provide services to diverse groups including pediatric, adult, and geriatric clients. These traineeships involve up to 20 hours per week in a clinical setting and provide stipend and tuition benefits. International students may qualify, contingent on obtaining appropriate New York State clinical licensure. The latter may take up to 12 months so interested prospective students should contact the coordinator as soon as possible during the application process. The instructional staff in Movement Science provides clinical supervision. A case study approach is used to directly bridge between substantive study and clinical practice. For more detailed information, contact the Coordinator of Clinical Traineeships at (212) 678-3325.

## COURSES:

BBS 4032. Neuroscience of human speech and language (1-2)
Professor Froud. An introduction to the neurological bases of normal speech and language perception, production and use.

## BBS 5060. Neuromuscular responses

 and adaptation to exercise (2) Professor Garber. A review of the physiology of muscle contraction in addition to in-depth discussion of topics related to the field which include: the relationship between muscle activation and respiration during exercise, muscle fatigue, eccentric versus concentric contractions and adaptation to strength training.
## BBS 5068. Brain and behavior I:

 Communication in the nervous system (1-2) Professor Gordon. An introduction to communication within the nervous system and functional brain neuroanatomy. Examination of chemical circuits in the brain and associated pathologies, such as Parkinson's disease, Tourettes, schizophrenia, depression, and anxiety.
## BBS 5069. Brain and behavior II:

Perception, emotion, memory and cognition (1-2)
Faculty. An introduction to brain processes associated with perception, emotion, memory and cognition. Consequences of damage to these neurobehavioral processes are examined through reading and discussion of clinical case studies.

BBSQ 4043. The human nervous system (3) Faculty. Anatomy and basic physiology of the central and peripheral nervous systems. Reflex systems, sensorimotor processes and the special senses; introduction to neuropathology and clinical neurology as related to rehabilitation.

## Substantive Study

## BBSR 4005. Applied anatomy and

biomechanics (3)
Faculty. Topics include: gross anatomy and function of human skeletal and muscular systems, mechanics of human movement, and analysis of skills in dance and physical education. Designed primarily for students without a prior course in anatomy or biomechanics. Students will be expected to participate in a laboratory offered immediately preceding the scheduled class time. Lab fee: $\$ 50$.

## BBSR 4050. Biomechanical analysis of human movement (3)

Professor Gordon. Permission required. Covers the principles and techniques required to analyze human movement, which can be used to develop practical research questions. Quantitative and qualitative techniques for analysis of movement are discussed in relation to the study of learning, motor control, motor development, and motor impairments. Lab fee: $\$ 50$.

BBSR 4055. Neuromotor processes (3) Faculty. Prerequisite: BBSQ 4043 or equivalent. An examination of the structure and function of the nervous system with specific reference to adaptive motor control.

BBSR 4060. Motor learning (2-3)
Professor McIsaac. Study of factors relating to the acquisition and performance of motor skills. Includes review and analysis of appropriate research findings.

BBSR 4070. Introduction to the psychosocial aspects of sport and exercise (2-3) Faculty. This course is designed to introduce students to the major psychosocial topics related to the performance of sport and exercise. Topics include the initiation, motivation and quality of performance, the roles of arousal, attention, and gender as well as principles of cognitive and behavioral change. Class readings, discussion and assignments are designed to facilitate the application of theory to the students' current sport or exercise-related employment.

## BBSR 4090. Physical fitness, weight

 control, and relaxation (2-3)Faculty. Contributions of exercise to human well-being throughout life. Classroom, gymnasium, and laboratory experiences included. Designed for teachers, counselors, and others who desire an introduction to basic concepts of physical fitness.

BBSR 4095. Applied physiology I (3)
Faculty. Prerequisite: a course in human physi-
ology. Physiological bases of exercise. Lectures concerning the effects of exercise on the major physiological systems (cellular, cardiovascular, thermoregulatory, pulmonary, renal, body fluids, hormonal).

BBSR 5028. Motor development across the lifespan (2-3)
Professor McIsaac. Review and analysis of theoretical models and experimental research related to development and performance of motor skills throughout the lifespan.

BBSR 5050. Neurophysiology of motor control and electromyography (3) Professor McIsaac. Review and analysis of theoretical models and experimental research related to development and performance of motor skills throughout the lifespan. Advanced topics dealing with the experimental and clinical use of electromyography. Topics will be integrated with the kinematics of movements being observed. A laboratory project using EMG will be required.
Lab fee: $\$ 50$.
BBSR 5055. Bases of motor control systems (3)
Faculty. Study of control processes subserving the coordination of movement.

BBSR 5057. Movement disorders (3)
Professor Gordon. Study of the pathophysiology of various movement disorders and the resulting motor impairments.

BBSR 5095. Exercise and health (3)
Professor Garber. The role of exercise in diagnosis, prevention, and rehabilitation of health problems such as cardiovascular disease, pulmonary disease, diabetes, obesity, and stress. Scientific evidence from both epidemiological and applied practice perspectives are emphasized.

## Laboratory Courses

## BBSR 4151. Laboratory methods in

 biomechanics (3)Dr. Kaminski. Permission required. Enrollment limited. Prerequisite: BBSR 4050. Students develop technical skills in the application of biomechanics to the study of movement behavior including video-based data collection and computer-based kinematic analysis. Students design and conduct a pilot research study using biomechanical analysis of a functional movement. Special fee: $\$ 75$.

BBSR 4161. Motor learning laboratory (1-2) Faculty. An introduction to qualitative and quantitative analysis of movement and action during acquisition of functional skills. Corequisite: BBSR 4060.

BBSR 4195. Applied physiology laboratory I (3)

Faculty. Co/prerequisite: BBSR 4095. The discussion and practice of techniques for collec-
tion and analyses of physiologic data (calibration, basal metabolism, body composition, static pulmonary functions, VO 2 measurements, physiography). Lab fee: $\$ 100$.

BBSR 5151. Introduction to the analysis of biomechanical signals (2-3)
Professor Gordon. Introduction to the concepts and techniques used in the analysis of biomechanical signals. Students will apply these techniques to actual kinematic, kinetic and electromyographic data using the LabVIEW programming language.

## BBSR 5194. Applied physiology laboratory II

 (3)Professor Garber. The discussion and practice of techniques for collection and analysis of physiologic data (strength testing, electromyography, computerized data acquisition). Lab fee: $\$ 100$.

## BBSR 5195. Advanced applied physiology

 laboratory (3)Professor Garber. Prerequisite: BBSR 5194. Introduction of advanced physiologic measurement techniques and concepts. Included are indirect calorimetry, spectrophotometry, vascular volume dynamics, autonomic reflexes, thermoregulation, noninvasive cardiac output, computer data plethysmography, tonometry, acquisition, and post-acquisition analyses. Lab fee: $\$ 100$.

BBSR 6070. Neural basis of respiration (3) Faculty. This course is designed to expose students to topics in respiratory control which relates to the fields of motor learning, exercise physiology, and speech. Topics include posture, balance and breathing, respiratory control of upper airway muscle activity, neural basis of exercise hyperpnea.

## Seminars and Conferences

## BBSR 4865. Tutorials in motor learning

 (1-2)Faculty. Review of theoretical and experimental studies in motor learning and motor control. Topics to be announced.

BBSR 5596. Topics in applied physiology (3) Faculty. Prerequisite: BBSR 5095 or equivalent. A seminar format used for discussion of advanced topics. Open only to doctoral and advanced master's students.

BBSR 5860. Motor learning conference (1) Faculty. Topics and speakers are announced in a separate brochure which may be obtained from the department office.

BBSR 4861. Workshop in motor learning and control (1-2)
Faculty. Students carry out a case study of skill acquisition in a functional movement task and integrate qualitative and quantitative findings in a final essay, characterizing the learning process.

## Biobehavioral Sciences

BBSR 6563. Neuromotor processes seminar (2)

Faculty. Offered in conjunction with review and analysis of research related to conference topic.

BBSR 6564. Advanced topics in neuromotor processes (2-3)
Faculty. Topic changes annually.
BBSR 6565. Seminar in motor learning and motor control (3)
Faculty. Review and analysis of theories and research in a selected topical area pertaining to acquisition of skill or control processes underlying skilled performance. Re-enrollment is permitted as topics vary.

## Fieldwork

BBSR 5200. Fieldwork in movement science (1-4)
Faculty. Permission required. For advanced students prepared to investigate problems.

BBSR 5251. Fieldwork seminar in motor learning and motor control (1-2)
Faculty. Applications of theory/research to therapeutic or educational practice for students in field-based settings.

BBSR 6201. Supervision of educational or clinical practice in the movement sciences (0-2)
Faculty. Permission required. Corequisite: Actual supervisory experience during that semester. For doctoral students in the movement sciences. Field-based experiences in the guidance of therapists or educators engaged in applying the movement sciences to clinical practice.

## Research Preparation

BBSR 4900. Research and independent study in movement science and education (1-6)
Faculty. Master's degree students undertake research and independent study under the direction of a faculty member.

BBSR 5504. Research training in motor learning (1-3)
Professor Gordon, Dr. McIsaac and Dr. Kaminski. Permission required. A competencybased approach to the preparation of researchers in the areas of neuromotor control and perceptu-al-motor processes. Several learning experiences are offered each semester, involving lectures, laboratory practica, seminars and individual research advisement.

BBSR 5582. Research design in the movement sciences (3)
Professor Silverman. Basic concepts of research design and statistical analysis. Students learn to interpret articles and design projects.

BBSR 5595. Research seminar in
applied physiology (1-3)
Professor Garber. M.A. students carrying out research-culminating projects enroll in this course near the end of their course of study to discuss and present their projects. Ed.M. and doctoral students enroll at least once in connection with each research project they complete.

BBSR 6900. Supervised independent research in movement science (1-9) Faculty. For advanced students who wish to conduct research under faculty guidance.

BBSR 7500. Dissertation seminar in movement science ( $0-3$ )

BBSR 8900. Dissertation advisement in movement science (0)
Faculty. Advisement on doctoral dissertation. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D. degree.

MSTC 5000. Neurocognitive models of information processing (1-3)
See the Department of Mathematics, Science and Technology for course description.

## CURRICULUM AND <br> TEACHING IN PHYSICAL EDUCATION

Program Coordinator:
Professor Stephen Silverman
Program Office:
(212) 678-3324

Email: ss928@columbia.edu

## Degrees Offered:

CURRICULUM AND TEACHING
IN PHYSICAL EDUCATION (PECT)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## Program Description:

The 32-point M.A. program is designed so physical educators can develop greater knowledge about curriculum and teaching. The $60-$ point Ed.M. program is designed to prepare teachers for leadership roles in schools. The program provides opportunities to study school-wide issues of curriculum, teaching, administration, and school reform. Specialized concentrations also are available in physical fitness program development and administration.

The Teach and Study Program, which is for qualified teachers of physical education, assists applicants in finding a physical education
teaching position (part-time or full-time) in schools in the Teachers College vicinity.

The 90 -point Ed.D. program prepares students to serve in leadership roles as specialists in physical education curriculum and teaching, administrators in schools and colleges, teacher educators, and/or researchers and faculty members in institutions of higher education.

## Special Application Requirements/Information:

Teach and Study applicants should request a separate application from the program office. They must also submit the Teachers College Application for Admission.

Doctoral applicants are required to submit a writing sample (preferably a course paper, master's thesis, or published article). Prior formal training and/or teaching experience in physical education is required for admission to the doctoral program. Applicants without a major or minor in physical education at the undergraduate level should submit letters verifying their physical education teaching experience.

## Degree Requirements:

The specific career goals of the student are used in planning the graduate program. Programs include one or more of the following features:

## Field-Based Experiences

The theoretical study of curriculum and teaching concepts is integrated with field-based applications of those concepts. Part of the student's graduate study experience takes place in elementary, secondary, or college physical education settings. Students who are concurrently employed as physical education teachers use their own schools as field sites; other students are assigned to selected field sites.

Program Design and Development
Students critically examine an array of traditional and innovative physical education program designs, and then formulate their own conception of curriculum. Program evaluation techniques are studied and then used to conduct field evaluations of ongoing programs. Students learn systematic techniques for program development and use them to plan programs for field settings.

Teaching: Performance and Analysis
Students critically evaluate existing theories and models of teaching, and devise their own concepts of teaching. A spectrum of analytic techniques is used to analyze videotaped and live samples of interactive teaching.

Study and Application of Concepts of Human Movement and Health Students study theory and research in the applied sciences of anatomy, movement analysis, exercise physiology, health, nutrition, motor learning, and their applications to program designs and teaching strategies.

## Culminating Experience

Students in the M.A. and Ed.M. programs are required to complete a culminating experience that integrates material from their coursework. This experience can be field-based, theoretical, or a research project related to physical education. The student and his or her advisor will discuss and design an individual experience that helps meet the goals of the student's program.

Research Competence (for Ed.D. students) All doctoral students develop proficiency in research and complete a dissertation under the advisement of a faculty sponsor. With their career goals in mind, students design their programs to include coursework that focuses on research methods and the results of research in physical education, and participate in research experiences to demonstrate competence and successfully complete the dissertation.

All doctoral students participate in an intensive seminar that reviews research in physical education and also attend a continuous research semester during most semesters of their enrollment in the program. Students must satisfactorily complete all parts of the program certification exam and a literature review to be certified and officially begin the dissertation process.

During the dissertation process, students work closely with an advisor and complete pilot studies to enhance their research skills. Students who are planning on academic careers that will include conducting research may participate in faculty research projects throughout their program to further enhance their research preparation.

## COURSES:

BBSR 4700. Student teaching in physical education (3)
Faculty. Student teaching in both elementary and secondary schools for a full semester. Includes a required seminar.

BBSR 5040. Curriculum designs in physical education (3)
Professor. Azzarito. Review of existing curriculum designs, traditional and new. Systematic development of curriculum plans.

BBSR 5041. Analysis of teaching in physical education (3)
Dr. Rasmussen. An analysis of the decisions and actions of teachers in relation to their role as director of learning. Includes experiences in executing and analyzing teaching skills.

BBSR 5043. Administration of physical education and athletics (2-3)
Dr. Rose. For prospective and in-service administrators. Preparation for carrying out administrative functions related to program planning, scheduling, budgeting, equipment and facilities, safety and liability, staff development, community relations, and others.

BBSR 5240. Fieldwork in curriculum and teaching in physical education (2-4) Professor Azzarito and Dr. Rasmussen. Field projects in program evaluation, curriculum development, analysis of teaching, and the application of teaching strategies.

## BBSR 5543. Seminar in physical education

 (2-3)Professor Silverman. Examination of current issues in curriculum and teaching in physical education relative to diverse student populations and associations with other disciplines. Advanced students prepare and present integrative papers.

BBSR 6340. Supervision in physical education (3)
Faculty. For doctoral candidates and supervisors in curriculum and teaching. Field-based experiences in the analysis and evaluation of programs and teacher performance.

BBSR 6540. Research seminar in curriculum and teaching in physical education (3) Faculty. Examines research problems and methodologies in curriculum and teaching in physical education.

## Courses that overlap all Movement Science Programs

BBSR 4070. Introduction to the psychosocial study of human movement (2-3) Faculty. A general overview of knowledge and theory pertaining to the psychosocial dynamics of behavior in sports and dance.

BBSR 4900. Research and independent study in movement science and education (1-6)
Faculty. Permission required. Master's degree students undertake research and independent study under the direction of a faculty member.

BBSR 5200. Fieldwork in movement science and education (1-4)
Faculty. Permission required. For advanced students prepared to investigate problems.

BBSR 5582. Research design in movement science and education (3)
Professor Silverman. Basic concepts of research design and statistical analysis. Students learn to interpret articles and design projects.

BBSR 6900. Supervised independent research in movement science and education (1-9)
Faculty. Permission required. For advanced students who wish to conduct research under faculty guidance.

BBSR 7500. Dissertation seminar in movement science and education (0-3) Faculty. Permission required. Candidate develops proposal for doctoral dissertation in consultation with advisor. Seminar convenes only on days when candidates present proposals for approval.

BBSR 8900. Dissertation advisement in movement science and education ( 0 ) Faculty. Individual advisement on doctoral dissertation. Fee to equal 3 points at current tuition rate for each term. For requirements, see catalog on continuous registration for Ed.D. degree.


## PHYSICAL EDUCATION

Program Coordinator:
Professor Stephen Silverman
Program Office: (212) 678-3324
Email:
ss928@columbia.edu
Website: www.tc.edu/bbs/Phys-Ed

## Degrees Offered:

PHYSICAL EDUCATION (PHED)
Master of Arts (M.A.)
PHYSICAL EDUCATION-
InITIAL CERTIFICATION (PHED-INIT)
Master of Arts (M.A.)
PHYSICAL EDUCATION.
PROFESSIONAL CERTIFICATION (PHED-PROF)
Master of Arts (M.A.)

## Program Description:

The course of study provides students with a broad background in physical education, the movement sciences, and related areas. It is designed for students whose career goals include teaching in schools and other environments, fitness management, coaching, and related areas. Students who are interested in obtaining K-12 New York State teacher certification in physical education must complete the state approved program and may require additional coursework beyond that required for the degree. Students should contact the program coordinator for transcript review and to develop a plan to meet teacher certification requirements.

## Degree Requirements:

After consultation with their advisor, students will select a minimum of 18 of the 32 required points in movement sciences and education courses. At least 6 points in Curriculum and Teaching in Physical Education are required. Additional courses may be selected from the following areas:

- Applied physiology
- Motor learning
- Psychosocial study of human movement
- Health education
- Nutrition
- Curriculum and teaching


## Integrative Paper

As part of their culminating experience, students present a special project that integrates their course experiences with an independently defined issue of professional concern.

Physical Education Teacher Certification Students wishing to be eligible for New York State Department of Education certification as a $\mathrm{K}-12$ physical education teacher must complete additional requirements beyond the M.A. degree. Among the other requirements are: (a) an undergraduate degree in kinesiology
or physical education or the equivalent in coursework (see below); (b) completion of 100 hours of pre-practica; (c) completion of a full semester of student teaching (BBSR 4700, 3 points); (d) completion of state-approved courses in Detection and Reporting of Child and Substance Abuse and in Violence Prevention; (e) satisfactory scores on the state administered Physical Education Content Specialty Test, ATS-W, and LAST tests. See the Teacher Education section of this bulletin for details. The exact coursework needed to complete New York State teacher certification requirements will be determined by the program coordinator when evaluating previous coursework.

## Entry to Teacher Certification Program

Students entering the physical education teacher certification program normally have an undergraduate degree in kinesiology or a related field (e.g., physical education, exercise science, movement science). Students who do not have a degree in physical education are required to have the equivalent in coursework in order to be admitted to the program or may make up the prerequisites once admitted to the program.

As a prerequisite to entering the teacher education program all students are required to have a minimum of 24 hours in the disciplinary aspects of kinesiology including courses in: (a) exercise/ applied physiology; (b) fitness and physical activity program planning; (c) biomechanics and anatomy; (d) sport psychology; (e) sport sociology/cultural studies of physical activity; (f) motor learning; (g) measurement and evaluation/assessment of physical activity; (h) growth and motor development; and (i) prevention and treatment of athletic injuries. All students are required to document competence in a wide variety of motor activities including: (a) team sports; (b) individual sports; (c) racquet activities; (d) dance and rhythms; (e) aquatics; (f) fitness activities; and (g) adventure activities. In order to meet the motor activity prerequisites, students may have completed a college class, have significant documented participation in the activity, or completed community education courses (e.g., Water Safety Instructor class through the American Red Cross). In addition, students in the Physical Education certification program are required to have first aid and CPR certification issued by a national certification agency.

Each student's transcript will be evaluated to determine if he or she has completed the prerequisites. Students who do not have the prerequisites will be required to make them up early in their program. Content course deficiencies will be made up, with the approval of the program coordinator, through courses at Teachers College, Columbia University or another college or university. Students who are deficient in physical activi-
ty courses will be required to make up courses through the Columbia College Physical Education program or other educational experiences that are approved by program faculty.

Required courses for physical education teacher certification:
-BBSR 4060 Motor learning (2)

- BBSR 4700 Student teaching in
- BBSR $4865 \quad$ physical education (3) learning (1)
-BBSR $5040 \quad$ Curriculum designs in
- BBSR 5041 Anssical education (3)

PBCR 5240 physical education (3)
-BBSR 5240 Fieldwork in curriculum and teaching in physical education (6)

- BBSR 5543
- BBSR 5582
-C\&T 4020
- HBSE 4000

> Seminar in physical education (3)
Research design in the movement sciences (3)

CBE 4000 The environments of schools (3)
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## NEUROSCIENCE AND EDUCATION

Program Coordinator:
Professor Peter Gordon
Program Office: (212) 678-8162
Email: pgordon@tc.edu
Website: www.tc.edu/bbs/NeuroSci

## Degree Offered:

NEUROSCIENCE AND EDUCATION (NEUR)
Master of Science (M.S.)

## Program Description:

Neuroscience and Education was the first graduate program in the country to focus on the educational and clinical implications of recent advances in understanding brain-behavior relationships. One objective of the multi-disciplinary program is to prepare a new kind of specialist: a professional with dual preparation able to bridge the gap between research underlying brain, cognition and behavior, and the problems encountered in schools and other applied settings. A second objective is to provide rigorous training and relevant experiences that would allow students to further their knowledge and make links between neuroscience, cognition, education, and clinical practice. The M.S. program is intended for professionals and non-professionals alike who would like to acquire knowledge in fields related to neuroscience, and participate in ongoing research, educational, or clinical practice. Graduates from the program may continue in
their respective areas of professional specialization, while others develop careers in research settings or apply to doctoral programs for further study.

## Special Application <br> Requirements/Information:

Applications will be considered throughout the year. Applications are available on-line by clicking on "Prospective Students" on the TC main website. GRE scores are not required but may be submitted by the applicant if available.

## Degree Requirements:

The program of study for the M.S. in Neuroscience and Education offers a systematic sequence of courses within the neurosciences.

- Basic courses provide a thorough introduction to the neural bases of behavior.
- Advanced courses explore implications of brain-behavior research for educational and clinical practice.
- Supervised practica enable students to engage in ongoing research projects in neu-roscience-related fields or to be involved in neuropsychological assessments and interventions.


## Course Requirements:

Psychological processes underlying development, learning, and cognition.

At least one course is required of the areas of developmental psychology and cognitive psychology. Possible courses fulfilling these requirements are listed below, but other courses in these areas or courses taken previously are also acceptable.

## Developmental Psychology

- HUDK 4021 Developmental psychology:
- HUDK 4022 Infancy (2-3)
- HUDK 4022 Developmental psychology: Childhood (2-3)
- HUDK 4023 Developmental psychology: Adolescence (2-3)
- HUDK 4024 Developmental psychology: Adulthood and the lifespan (2-3)
- HUDK 4027 Development of mathematical thinking
- HUDK 5023 Cognitive development (3)
- HUDK 5024 Language development (2-3)


## Learning and Cognition

- HBSK 5096 Psychology of memory
- HUDK 4015 Psychology of thinking
- HUDK 4029 Human cognition and learning
- HUDK 4080 Educational psychology
- HUDK 4820 Education for thinking
- HUDK 5025 Spatial thinking

Psychological Evaluation and Assessment
Two courses in statistics, measurement, or assessment are required. These could include the following:

- BBSR 5582
- HUDM 4050
- HUDM 4120
- HUDM 4122
- HUDM 5122 Applied regression analysis
- HUDM 5123
- HUDM 5124

Research design in the movement sciences (recommended for Neuroscience Students) Introduction to measurement (2-3)
Basic concepts in statistics (3) Probability and statistical inference (3) (3) Linear models and experimental design (3) Multidimensional scaling and clustering (3)

## Educational or Clinical Specialization

A set of courses representing a cohesive sequence of study in such areas as: audiology, counseling psychology, educational psychology, math education, motor learning, advanced neuroscience, science education, speech pathology or special education.

## Neurobiological Bases of Behavior and Educational Applications

## Core Courses

The courses indicated below are for students with little or no prior background in Neuroscience. With consultation and approval of the advisor, three to four courses are required unless equivalent preparation can be demonstrated.

- BBS 4032

Neuroscience of human speech and language (2)

- BBS $5068 \quad$ Brain and behavior I: Communication in the nervous system (1-2)
- BBS 5069 Brain and behavior II: Perception, emotion, memory, and cognition (1-2)
- BBSQ 4040 Speech and language disorders (3)
- BBSN 5070 Neural bases for language and cognitive development (3)
- HUDK 6620 Special topics in developmental psychology (1-3)


## Advanced Courses in Neuroscience

Such courses may count toward the Clinical and Educational Specialization component of the program. Students who wish to develop more advanced knowledge within the neurosciences may register for up to 12 points of advanced courses in neuroscience offered outside of TC at Columbia University College of Physicians and Surgeons, and Faculty of Arts and Sciences.

## Seminars

All students are required to register for the Integrative Seminar. In this seminar, students develop their ideas for the thesis topic, learn about research and practice, and develop presentations for Brain Awareness Week in the local schools:

- BBSN 5575 Integrative seminar in neurosciences and education (3)


## Practicum and Research Experience

Students find placements in research or clinical settings either at TC or throughout the city in order to provide an experience that will become the basis for their thesis project. Students may register for research credit or independent study during this period. Teachers College and Columbia University offer courses to develop research skills in areas such as Brain Imaging. These include courses in the use of high density EEG, which is offered as a summer workshop. A course in the use of fMRI in cognitive research is also available through the Neurological Institute of the Columbia Medical School. Both courses offer hands-on training with the relevant procedures.

Master's Integrative Project
Opportunities for student participation in research are available. Preparation of a master's integrative project is required for the degree. The integrative project involves either a research project, a practicum report, or an integrative review.

## SPEECH AND LANGUAGE PATHOLOGY

Program Coordinator:
Professor John H. Saxman
Program Office: (212) 678-3895
Email: saxman@tc.edu
Website: www.tc.edu/bbs/SpeechLanguage

## Degrees Offered:

SPEECH AND LANGUAGE PATHOLOGY (SPTH)
Master of Science (M.S.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)
SPEECH-LANGUAGE PATHOLOGY-
initial certification (SPTH-INIT)
Master of Science (M.S.)
SPEECH-LANGUAGE PATHOLOGYPROFESSIONAL CERTIFICATION (SPTH-PROF)
Master of Science (M.S.)
BILINGUAL EXTENSION INSTITUTE (SPTB)
Certificate

## Program Description:

The master's program in Speech and Language Pathology is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association. The program in Speech-Language Pathology and Audiology offers, advanced education and training in the processes of individual human communication (speech, hearing, language and upper aero-digestive disorders); disorders of human communication, and swallowing and remedial procedures for such disorders.

Emphases and interests of the program are reflected in the work of the following faculty: Professor O'Malley- psychoacoustics, including frequency selectivity, two-tone suppression, auditory spectral resolution, pitch, and auditory temporal acuity; Professor Saxman- speech and language development and disorder, vocal tract function and dysfunction and lifespan development of speech processes; Professor Levy- crosslanguage speech production and perception and second-language speech learning; Professor P. Gordon- language acquisition, psycholinguistics, cognitive development in infants and children; Professor Froud- acquired language pathology, neural correlates of normal and abnormal speech and language; Professor Malandraki- swallowing and voice disorders, neuroimaging in the study of swallowing, telepractice in dysphagia rehabilitation. Catherine Crowley- Bilingual Speech Language Pathology, and identifying critical factors that help distinguish between speech and language difference and disorders.

Programs leading to the M.S., Ed.D., and Ph.D. degrees in Speech-Language Pathology prepare graduates for positions in a variety of professional settings: school systems, community speech and hearing centers, rehabilitation centers, hospital clinics, private practice, state departments of education, health departments, federal agencies, and colleges and universities.

Because of the program's central concern with the processes of individual human communication, swallowing and their disorders and management, it has special interests in, and relations with, the fields of psychology, linguistics, anatomy and physiology, acoustics, special education, medicine, and dentistry.

Many of the program's courses in normal and disordered speech and hearing, and upper aerodigestive processes contribute to professional preparation in speech and language arts, kindergarten through secondary school education, special education, remedial reading, psychology, and various health related professions, including physical therapy, occupational therapy, dental hygiene, nursing, and hospital administration.

## Special Application Requirements/Information:

Ideally, candidates should have a broad liberal arts background with concentration in the biological and behavioral sciences.

Students from diverse academic and experience backgrounds are routinely accepted into the program and encouraged to apply.

Applications for master's in Speech-Language Pathology are considered for admission regardless of specific certification of interest.

Foundation courses that provide information relating to normal speech, language and hearing processes; introductory level courses in speech, language, and hearing disorders; and, appropriate related areas required for the master's program can be taken as a matriculated graduate student at Teachers College or at another accredited institution.

Students with undergraduate preparation in communication sciences and disorders typically have completed the foundation courses. Students who choose to take the foundation work at Teachers College should plan on extending their master's program as appropriate, usually one semester and a summer session.

Doctoral candidates should have completed a professional master's degree in communication sciences and disorders prior to matriculation. Under exceptional circumstances, students with a master's degree in a closely related field will be considered for admission. In addition to the regular admission requirements, doctoral applicants must also submit:

## Doctor of Education (Ed.D.)

At least one letter of recommendation specifically related to the applicant's professional ability and potential. Whenever possible, this should be from a licensed or certified speech and language pathologist or audiologist familiar with the applicant's area of specific interest. A paper, no more than five or six pages in length, describing a major clinical problem in need of investigation or clarification in the applicant's area of interest may also be submitted.

Doctor of Philosophy (Ph.D.)
If possible, at least one letter of recommendation related to the applicant's research potential by a professional familiar with the applicant's interests and aptitudes. A paper, not more than 5 or 6 pages in length, describing a major research need in the applicant's area of interest. Completion of at least 90 points in liberal arts courses.

## All Doctoral Applicants

Doctoral applicants are strongly urged to discuss their plans with one of the department's faculty before completing the application process. After all credentials have been received in the Admission Office, an interview will be arranged by the Department's Doctoral Admission and Monitoring Committee.

## Degree Requirements:

## Master of Science

This degree program leads to professional licensing, professional certification, and if elected, to teacher of speech and hearing handicapped certification. Students are required to complete academic and practice requirements for the New York State License in Speech-Language Pathology and the Certificate of Clinical Competence offered by the American Speech-Language-Hearing Association to be eligible for graduation with the Master of Science Degree.

This requirement means that it is the responsibility of the student to satisfy the required 74 points of coursework in appropriate specified areas for the ASHA CCC-SLP before completion of the M.S., either through coursework taken at Teachers College or through an approved distribution of courses completed at Teachers College and at another regionally accredited institutions (including undergraduate coursework).

This requirement is in addition to the specific courses and minimum points required by Teachers College faculty to satisfy the Master of Science degree requirements. Although course points from other institutions are not transferred to the student's program, courses taken elsewhere and approved by the student's academic advisor as equivalent to coursework required to satisfy the ASHA certification requirements or selected departmental requirements do not need to be repeated at Teachers College.

The minimum number of points for completion of the Program in Speech-Language Pathology is approximately 50 , including practicum courses. Students who have no previous applicable coursework in the field typically require 74 points to complete the requirements for graduation.

Students admitted to the program with undergraduate majors in speech and language pathology or with substantial prior coursework can expect to complete the program within two calendar years (four semesters and two summer sessions) of full-time study.

Students admitted with little or no prior coursework can expect to complete the program in two and one-half calendar years of full-time study. Some accommodations can be made for part-time study during a portion of the program, but students must be enrolled in practicum experiences (BBSQ 5331/2) from their first semester and in all subsequent semesters of their enrollment.

## Academic and Practicum Requirements

Basic Human Communication Processes: In the area of normal human communication processes, students are required to take two courses in each of three areas of speech, language, and hearing, including:

- anatomic and physiologic bases
- physical and psychophysical bases
- linguistic and psycholinguistic aspects

These courses will total at least 15 points. This coursework may be taken at either the undergraduate or graduate level. Students with an undergraduate degree in communication disorders will have taken some or all of this coursework as part of their undergraduate preparation.

Material covered in the following courses must have been included as part of the student's prior coursework or must be taken at Teachers College:

- BBSQ 4030
- BBSQ 4031
- BBS 4032
- BBS 5068

Speech science (3) Anatomy and physiology for speech, language and hearing (3) Neuroscience of human speech and language (2) Brain and behavior I:

Communication in the nervous system (1-2)

The remainder of the normal human communication processes requirement can be fulfilled through a variety of course options such as: BBSQ 5044, Speech and language perception and processing; A\&HL 4101, Phonetics and phonology; HBSE 4079, Language development and habilitation; HUDK 5024, Language development; HUDK 5090, The psychology of language and reading; A\&HL 4000, Introduction to linguistics; A\&HL 4003, Linguistic analysis; ITSF 4024, Linguistic foundations of bilingual/ bicultural education; and other courses listed in the program materials.

## Professional Coursework

In professional area coursework, students are required to take 7 points in hearing disorders and a minimum of 30 points in speech-language disorders. The professional area coursework in speech-language pathology must be at the graduate level and must include a minimum of 6 points in courses within the program that are not part of the core requirements. In addition, only 3 points of practicum coursework can be used to fulfill the 30 -point professional area requirement. Only courses for which a grade of at least a $C$ has been earned can be used to fulfill these requirements.

## Core Coursework

The following core courses must be taken at Teachers College or the equivalent course material must have been taken as part of a student's
prior coursework and approved by the student's academic advisor:

Speech-Language Pathology

- BBSQ 4040 Speech and language disorders (2)
- BBSQ 5111 Assessment and evaluation (3)
- BBSQ 5112 Articulation disorders (3)
- BBSQ 5113 Voice disorders (3)
- BBSQ 5114 Stuttering: Theory and therapy (3)
- BBSQ 5115 Language disorders in children (3)
- BBSQ 5116 Language disorders in adults (3)
- BBSQ 5130 Assessment and intervention in dysphagia (2)


## Hearing

- BBSQ 4042
- BBSQ 5125
- BBSQ 5129 Audiological concepts and principles (1)
- BBSQ 5343 Hearing measurements (1)


## Additional Coursework

Students are required to take a minimum of 6 points of professional area coursework within the program in Speech-Language Pathology in addition to the required core courses. Some additional courses are offered yearly, while others are offered on a less regular or a onetime basis. There are also seminars that are open to advanced master's students. The following is a list of additional courses:

- BBSQ 4046 Introduction to augmentative and alternative communication (1)
- BBSQ 4047 Early motor behaviors in children: Normal and abnormal (3)
- BBSQ 5118 Cleft palate and speech habilitation (2-3)
- BBSQ 5119 Alaryngeal speech (1)
- BBSQ 5130 Assessment and intervention in dysphagia (2)
- BBSQ 6111 Current issues and practices in speech-language pathology (1-3)


## Research Methods

Students are required to take BBSQ 5940, Evaluating research in speech-language pathology, and audiology or to have previously taken equivalent coursework. This course is offered during the fall term.

## Breadth Courses

Students in this program are required to take two Teachers College courses (for at least 2 points each) in departments other than their major program area. These courses may be used to fulfill the requirements for coursework
in normal human communication processes or may be in related professional areas. Breadth courses may be taken pass/fail. Currently, any advisor approved non-BBSQ course meets the breadth requirement.

## Bilingual Emphasis Track

The Bilingual Emphasis Track is for students who wish to develop expertise in working with culturally and linguistically diverse children and adolescents with communication disorders. Following the bilingual emphasis track will satisfy the coursework and field placement requirements for the bilingual extension to the New York State teachers of students with speech and language disabilities certificate. Under New York State Education Department regulations, the bilingual extension certificate is required to provide speech and language intervention for bilingual children and adolescents ages 3 through 21. This includes working in a school system in New York State as well as providing bilingual therapy in a private practice where funding comes from the New York City Department of Education or the New York State Education Department.

The requirements for the New York State bilingual extension certificate, as integrated into the Master's of Science program in speechlanguage pathology, are:

- BBSQ 5041 School speech-languagehearing programs (2-3)
- BBSQ 5111 Assessment and
- BBSQ $5115 \quad$ evaluation (3) in children (3)
- BBSQ 5120 Communication disorders in bilingual/bicultural children (3)
- Fifty hours of bilingual therapy/evaluations with children and/or adolescents supervised by a certified bilingual speech-language pathologist as part of the total hours required by ASHA.
- A passing score on the New York State Education Department's Target Language Proficiency Test in the student's non-English language and in English. Students must pass the test before their last semester at Teachers College.


## Practicum Requirements

- Therapy practicum. Students enroll in Practicum (BBSQ 5331 and BBSQ 5332) starting with their first semester at Teachers College and continue in Practicum during each subsquent semester, including at least one summer (BBSQ 5315 and BBSQ 5316). Assignment and participation in each of these Practicum experiences is determined by and at the discretion of the Clinic Program Coordinator.

Students continue in Practicum until a satisfactory level of clinical competence appropriate for entry into the Clinical Fellowship Year has been demonstrated. Students without background in the field typically enroll for six or seven semesters of Practicum, while students with background tend to enroll for five or six semesters of Practicum. Students accrue a minimum of 400 supervised clinical hours within a minimum of three service sites in addition to the on-campus Edward D. Mysak Clinic for Communication Disorders. These field placements typically include a school site, a hospital, and a rehabilitation site.

- Diagnostics. Students are required to enroll in one semester of diagnostic Practicum (BBSQ 5312). This Practicum experience follows BBSQ 5111, Assessment and evaluation, and is contingent upon satisfactory completion of academic coursework and therapy Practicum experiences in a variety of disorder areas. Assignment to this Practicum is also determined by and at the discretion of the Clinic Program Coordinator.
- Clinic Lab. Students must enroll in BBSQ 5333 or BBSQ 5334, depending on previous academic background. This is a one-semester course in Laboratory Methods and Instrumentation in Clinical Practice that is taken for 1 point. All students meet once a week for a lecture/presentation. Students are also assigned to small group workshop sessions during the day.
- Hearing Practicum. Students are required to enroll in BBSQ 5343, Hearing measurement. This is a one-semester, 1-point practicum that fulfills the New York State requirement for clinical hours in Audiology.


## Doctor of Education

This degree program leads to a professional doctorate in Speech-Language Pathology and is designed to prepare candidates for professional leadership in clinical, supervisory, and teaching activities. A minimum of 90 points must be completed. There is no language requirement.

## Doctor of Philosophy

This program is designed for individuals primarily interested in careers in SpeechLanguage Pathology, in research, and college teaching. A minimum of 75 points must be completed. There is no language requirement.

All doctoral candidates must complete a dissertation. For details concerning the doctoral programs, please consult the Office of Doctoral Studies' bulletins for additional information. Requirements for the Degree of Doctor of Education and Requirements for the Degree of

Doctor of Philosophy are available by request from the program office (212) 678-3895.

## Continuing Professional Education

Each year the Speech-Language Pathology program offers courses, workshops, and special events designed for postgraduates and other practicing professionals in the field and related fields. Also, under the Alumni Audit Program, alumni may audit courses offered through the program at substantially reduced fees. The program in Speech-Language Pathology and Audiology is approved by the Continuing Education Board of the American Speech-Language-Hearing Association as a continuing education sponsor.

## Academic, Practical, and Research Training Opportunities

Instruction in the areas of speech and language pathology and audiology includes formal coursework (lectures, seminars, colloquia) and practica training. The formal coursework within each area is supplemented by videotape and live-case presentations by the instructors and by direct experiences with clients within the Edward D. Mysak Clinic for Communication Disorders. Practical training at the master's and doctoral levels includes lecture/ demonstrations, small-group instruction, and direct experience with clients. Students engaged in practica are supervised individually and in groups by the faculty and staff of the program. Unusual opportunities for learning and inquiry with reference to advanced clinical, supervisory, teaching, and research activities are provided within the large, well equipped, and active Edward D. Mysak Clinic for Communication Disorders.

Opportunities for clinical and research experiences also exist in numerous affiliated field settings. For example, practical training experiences are available in approximately 60-80 selected field facilities including hospital, rehabilitation centers, and school settings.

The program's Clinic Laboratory is used to train students in the application of precision instrumentation for objective measurement of the phonatory, articulatory, and fluency dimensions of speech behavior. The laboratory is an integral element in the diagnostic and treatment services provided by the Speech and Hearing Center and enhances opportunities for clinical research.

Special learning and research experiences are available through the program's Speech Research Laboratory and for qualified students, in laboratories maintained by the Department's programs in applied physiology
and motor learning. Additional research facilities are available in several related Teachers College programs and Columbia University departments in various affiliated institutions throughout the greater New York metropolitan area.

## Traineeships

Traineeships on the master's and doctoral levels from the Veterans Administration, the League Center, and other agencies are available through the department.

The program for preparing teachers of students with speech and language disabilities is approved by the New York State Education Department. The Ph.D., Ed.D., and M.S. programs are also registered by the New York and New Jersey State Education Departments.

## COURSES:

## General

## BBSQ 4040. Speech and language

disorders (2-3)
Professor Saxman. Discussion of speech and language disorders and of remedial procedures. For speech pathology-audiology majors without academic background in speech and hearing and students in language arts, psychology, guidance, special education, childhood education, health education, nursing education, physical and occupational therapy, and dental hygiene.

BBSQ 4042. Audiology (2-3: Majors take course for 2 points only)
Professor O'Malley. This course covers acoustics, anatomy and physiology of the auditory system, pure tone and speech audiometry, types and communication effects of hearing loss, amplification, and immitance.

BBSQ 4046. Introduction to augmentative and alternative communication (1)
Ms. Cohen. This introductory course will provide a comprehensive overview of Augmentative and Alternative Communication (AAC). A thorough examination of the assessment and therapeutic processes will be presented. Emphasis will be placed upon individuals exhibiting severe communication disorders secondary to congenital/acquired cognitive and motor impairments. Low and high-tech AAC systems will be discussed and demonstrated. Important to speech therapists, special educators, psychologists, occupational and physical therapists, school administrators and other health professionals.

BBSQ 4047. Early motor behaviors in children: Normal and abnormal (2-3)
Dr. Sheppard. Study of normal and abnormal development of sensory-motor speech processes and related oral motor behaviors; etiology, diagnosis, and management of pre-speech and
eating pathologies in infants and severely handicapped individuals from an early intervention perspective.

## BBSQ 5041. School speech-language-

 hearing programs (2-3)Faculty. Prerequisite: BBSQ 4040 or equivalent. Analyzes impact of federal and state laws on service delivery in school setting. Develops skills to meet the needs of communicationdisordered students with the full range of disabilities, including working with other professionals to assist children in accessing the general curriculum.

## Basic Speech and Hearing Science

BBSQ 4030. Speech science (3)
Professor Saxman. Kinesiologic approach to the study of phonetics and the phonetics of physiologic impairment. Practice in use of the International Phonetic Alphabet and other descriptive systems.

BBSQ 4031. Anatomy and physiology for speech, language and hearing (3) Dr. Nicholas. Basic structures and functions of the articulatory, vocal, and auditory mechanisms. Application of such study to the field of speech-pathology and audiology.

BBSQ 5044. Speech and language perception and processing (2-3: Majors take course for 2 points only) Professor O'Malley. Examination of the models proposed to explain speech perception and discussion of the research which assigns to speech and language a special role.

## Applied Speech Science Courses <br> (Speech-Language Pathology)

BBSQ 5125. Clinical approaches to aural habilitation of children (3) Dr. Nicholas. Prerequisite: BBSQ 4042 or equivalent. Clinical procedures available to audiologists, speech pathologists and deaf educators for implementing speech-reading, auditory training, and speech language therapy for the hard-of-hearing child. Use of amplification and counseling approaches.

BBSQ 5111. Assessment and evaluation (3) Dr. Crowley. Permission required. Required of speech pathology majors. Prerequisites: An introductory course in speech-language pathology and a course in normal language development. Studies use of published tests, technology, and alternative and curriculumbased strategies in assessment. Focuses on impact of bilingualism and sociolinguistics on the assessment of culturally and linguistically diverse clients across the lifespan, covering the full range of disabilities.

BBSQ 5112. Articulation disorders (3) Professor Levy. Prerequisites: Phonetics course and an introductory course in speech pathology. Study of phonological rule disorders and dis-
orders associated with functional and various structural and neurological problems. Critical analysis of research in etiology, testing, and therapy.

BBSQ 5113. Voice disorders (3)
Professor Malandraki. Prerequisite: BBSQ 4031 or equivalent and an introductory course in speech pathology. Study of voice disorders associated with functional, structural, endocrinological, and neurological problems. Analysis of recent research and major approaches to voice therapy.

## BBSQ 5114. Stuttering: Theory and therapy

 (3)Professor Malandraki. Prerequisite: An introductory course in speech pathology. Analysis of major theories and research on stuttering. Study of prophylactic principles for younger children and evaluative and therapeutic procedures for older children and adults.

## BBSQ 5115. Language disorders in

 children (3)Dr. Crowley. Prerequisites: An introductory course in speech-language pathology and a course in normal language development. Language disorders in children, including native English speakers and children from culturally and linguistically diverse homes, covering the full range of disabilities. Course covers birth through late adolescence and includes impact of language disorders on language acquisition, literacy development, and uses of technology.

## BBSQ 5116. Language disorders in

 adults (3)Professor Froud. Prerequisite: BBSQ 4040 and BBS 4032 or equivalent. Theoretical and practical approaches to understanding the etiology, assessment, classification, and treatment of aphasia and other communication disorders in adulthood.

BBSQ 5118. Cleft palate and speech habilitation (2-3)
Professor Saxman. Prerequisite: An introductory course in speech pathology. Etiology and symptomatology of the communication impairment associated with cleft lip and palate and other craniofacial disorders. The role of the speech pathologist in the multidisciplinary approach to total habilitation of children and adults.

BBSQ 5119. Alaryngeal speech (1)
Faculty. Prerequisite: An introductory course in speech pathology. Survey of medicosurgical treatments for laryngeal carcinoma. Analysis of physiologic, acoustic, and psychosocial aspects of alaryngeal speech. Study of therapeutic methods.

BBSQ 5120. Communication disorders in bilingual/bicultural children (3)
Dr. Crowley. Study of effect of bilingualism, bilingual education, sociolinguistics, psycholinguistics and multicultural perspectives in
education on the communication disordered child. Considers appropriate assessment and treatment to ensure optimal academic success for English Language Learners, bidialectal, and bicultural children with communication disorders, covering the full range of disabilities.

## BBSQ 5130. Assessment and intervention

 in dysphagia (2)Professor Malandraki. Clinical practice in swallowing and feeding disorders in children and adults. Normal and abnormal development and mature function assessment, and treatment.

## Applied Hearing Science Courses (Audiology)

BBSQ 5125. Clinical approaches to aural habilitation of children (3)
Faculty. Prerequisite: BBSQ 4042 or equivalent. Clinical procedures available to audiologists, speech pathologists and deaf educators for implementing speech-reading, auditory training, and speech-language therapy for the hard-ofhearing child. Use of amplification and counseling approaches.

BBSQ 5129. Audiological concepts and principles (1)
Professor O'Malley. Prerequisite: BBSQ 4042, Audiology. This course covers auditory pathologies, electrophysiological (ABR), and electracoustical (OAE) tests. Tests of central auditory function, controversial issues in audition.

## Practica

BBSQ 5210-BBSQ 5212. Practicum in school speech-language pathology (3) Dr. Youse. Permission required. Participation and student teaching in a school remedial speech and hearing program: survey, organization, remedial procedures. Special fee: $\$ 150$.

BBSQ 5312. Diagnostic methods and practice in speech-language pathology (3) Dr. Youse. Required of speech pathology majors. Prerequisite: BBSQ 5111. Methods of assessing native English speakers and culturally and linguistically diverse clients, including English Language Learners. Ways to plan or modify instruction based upon information gathered through assessment. Analysis of language skills related to literacy and overall academic achievement. Uses of instructional and assistive technology in assessment. Methods of assessing clients within the full range of disabilities and across the lifespan. Special fee: $\$ 150$.

## BBSQ 5331-BBSQ 5336. Therapy

 practicumFaculty. Assessment and intervention planning and implementation for clients across the full range of disabilities and across the lifespan. Coursework covers the needs of native English speakers and English Language Learners in hospitals and school settings. College-supervised practica. For bilingual emphasis students, at least fifty clock hours in providing bilingual services.

- BBSQ 5331-BBSQ 5332.

Regular clinic (3)
Dr. Youse (Coordinator). Observation and practice in speech and language therapy at the Speech and Hearing Center and at related field facilities. Weekly lecture on principles of speech and language therapy (three semesters). Majors enroll until practicum requirements for the M.S. degree are completed. Special fee: $\$ 150$.

- BBSQ 5333-BBSQ 5334. Laboratory methods and instrumentation in clinical practice (1)
Faculty. Instruction and practice in acoustic and physiologic measures related to voice, articulation, and fluency disorders. Majors must enroll for one term. Special fee: $\$ 150$.
- BBSQ 5335. Infant evaluation clinic (0) Dr. Sheppard. Observation and participation in the evaluation of pre-speech and feeding behaviors in at-risk infants and in the development of individualized management programs. Special fee: $\$ 150$.
- BBSQ 5336. Stuttering clinic (0) Dr. Wexler. Observation and participation in group therapy for adult stutterers. Special fee: $\$ 150$.

BBSQ 5343. Hearing measurement (1) Dr. Nicholas. Prerequisite: BBSQ 4042. Practice in hearing screening, audiological evaluation, and aural rehabilitation issues across the lifespan. For speech and language pathology majors. Special fee: $\$ 150$.

BBSQ 6351-BBSQ 6355. Advanced practice (2)
Faculty. Advanced practice in speech-language pathology and audiology required. Doctoral students are required to register in four sections during their period of candidacy. Observation of faculty during therapy, diagnosis, supervisory, teaching, or research activities and participation in such activities.

- BBSQ 6351. Clinical (2)
- BBSQ 6352. Supervision (2)
- BBSQ 6353. Teaching (2)
- BBSQ 6354. Laboratory (2)
- BBSQ 6355. Administration (2)


## Research Courses and Seminars

BBSQ 5940. Evaluating research in speechlanguage pathology and audiology (3) Professor O'Malley. Required of all master's and first-year doctoral students. Evaluation of research methods.

BBSQ 5941. Research needs and methods in speech-language pathology and audiology (3) Professor Saxman. Permission required. Prerequisite: BBSQ 5940. Required of first-year
doctoral students. Development of rationales for doctoral dissertations and projects.

BBSQ 6513-BBSQ 6517. Seminars in basic and applied speech science (3)
Faculty. Permission required. For doctoral candidates and advanced master's degree students in speech-language pathology. Doctoral candidates are required to enroll in at least three sections. Seminars involve intensive study and analysis of current research and issues in the particular topics.

- BBSQ 6513. Phonological impairment (children and adults) (3)
- BBSQ 6514. Language: Brain, biology and language acquisition (3)
- BBSQ 6515. Voice and its disorders (3)
- BBSQ 6516. Fluency and its disorders (3)
- BBSQ 6517. Neuropathology of speech (3)

BBSQ 6940-BBSQ 6941. Supervised research in speech-language pathology and audiology (3)
Faculty vary by section. Permission required.
Prerequisite: BBSQ 5941. Doctoral candidates are required to enroll in their advisor's section for both semesters. Opportunity to design and conduct pilot studies and projects.

BBSQ 7500. Dissertation seminar in speech-language pathology and audiology (2) Professor Saxman and faculty. Prerequisite: BBSQ 6941. Development of doctoral dissertations and projects and presentation of plans for approval. Doctoral candidates are required to enroll for one year and must begin the sequence in the fall term immediately following completion of BBSQ 6941.

BBSQ 8900. Dissertation-advisement in speech-language pathology and audiology (0) Faculty. Prerequisite: BBSQ 7500. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

## BBSQ 5820. The Bilingual Extension

 Institute (6)The Institute is co-sponsored by the Department of Biobehavioral Sciences and the Center for Educational Outreach \& Innovation and is approved for non-matriculated, non-degree students. Dr. Crowley, Coordinator.

This Institute satisfies the academic and field experience requirements of the New York State Education Department for the bilingual extension to the teachers of students with speech and language disabilities teaching certificate. All Institute content is geared to developing the knowledge and skills needed to provide quality bilingual speech and language services. Through this "communication disor-
ders" lens, the Institute provides content in bilingualism and normal processes of second language acquisition, theories and methods of bilingual education, sociolinguistics, psycholinguistics, and dialectology. Institute content is tied to the development of clinical judgment based upon the current research and the law including identifying a language disorder from a language or cultural difference, providing services to meet the curriculum standards in the native language and in English, and collaborating with teachers and families. Great effort is made to connect lectures, presentations, discussions and hands-on experience in class to the experience of clinical work in schools. The Institute meets for six weekends in May, June, September, October, November, and December and is taught by its eight-person faculty.

## Continuing Education

BBSQ 5815. Managing swallowing and feeding problems in the classroom (2) Dr. Sheppard. Study of eating and swallowing disorders in children: assessment and management strategies for eating and swallowing disorders.

BBSQ 6111. Current issues and practices in speech-language pathology ( $1-3$ ) Faculty. Topics will vary with respect to current issues and practices in speech-language pathology.


# Counseling and Clinical Psychology 

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## PROGRAMS:

CLINICAL PSYCHOLOGY 70
COUNSELING PSYCHOLOGY 74

PSYCHOLOGICAL COUNSELING 79

PSYCHOLOGY IN EDUCATION 81


## DEPARTMENTAL MISSION:

The Department of Counseling and Clinical Psychology prepares students to investigate and address the psychological needs of individuals, families, groups, organizations/institutions, and communities. Counseling Psychology focuses on normal and optimal development across the lifespan, with particular attention to expanding knowledge and skills in occupational choice and transitions and multicultural and group counseling.

Clinical Psychology provides rigorous training in both contemporary clinical science and intervention. Increasingly, both aspects of this training have been focused on the needs of at-risk children and adolescents. The clinical component of the program reflects an ongoing psychodynamic tradition with additional opportunities for training in other theoretical models.

Thus, students in this department are trained to become knowledgeable and proficient researchers, to provide psychological and educational leadership, and to be effective practitioners. Specifically, graduates from these programs seek positions in teaching, research, policy, administration, psychotherapy, and counseling.

## FACULTY:

## PROFESSORS:

George Bonanno (Clinical)
Robert T. Carter (Counseling)
Barry A. Farber (Clinical)
Suniya Luthar (Clinical
and Developmental)
Elizabeth Midlarsky (Clinical)
Derald Wing Sue (Counseling)

## ADJUNCT PROFESSORS:

Xavier Amador (Clinical)
Jesse D. Geller (Clinical) Jerome W. Kosseff (Clinical) Judith Kuriansky (Clinical)
Catherine Lord (Clinical - Affiliated)
Arnold W. Wolf (Counseling)

## ASSOCIATE PROFESSORS:

George V. Gushue (Counseling)
Lisa Miller (Clinical)
Marie L. Miville (Counseling)

## ADJUNCT ASSOCIATE PROFESSORS:

Edith Cooper (Clinical)
Patti Cox (Counseling)
David Greenan (Counseling)
Billie Pivnick (Clinical)
Dinelia Rosa (Clinical/Counseling)
Gil Tunnell (Counseling)

## ASSISTANT PROFESSORS:

Melanie Brewster (Counseling)
Jill Hill (Counseling)
Michael Lau (Counseling)
Laura Smith (Counseling)
Helena Verdeli (Clinical)

## LECTURERS:

Aurelie Athan (Clinical)
Elizabeth Fraga (Counseling)
Randall Richardson-Vejlgaard
(Clinical)
Riddhi Sandil (Counseling)
Teraesa Vinson (Counseling)

ADJUNCT ASSISTANT PROFESSORS:
Philip Blumberg (Clinical)
Susan Bodner (Clinical)
Stephanie Fagin Jones (Clinical)
Motoni Fong-Hodges (Counseling)
Peter Freed (Clinical)
Merav Gur (Clinical)
Karen Hurley (Clinical)
Shamir Khan (Clinical)
Richard Keller (Counseling)
Michael J. Koski (Counseling)
Samuel E. Menahem (Clinical)
Nancy Nereo (Clinical)
Elizabeth Owen (Clinical)
Gregory Payton (Counseling)
Jill M. Rohrbacker (Counseling)
Jason Rudolph (Clinical)
Andrea Safirstein (Counseling)
Jephtha Tausig Edwards (Clinical)
Anika Warren (Counseling)
A. Jordan Wright (Clinical)

For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit us at www.tc.edu/faculty.

## CLINICAL PSYCHOLOGY

Program Coordinator and
Director of Clinical Training:
Professor Lisa Miller
Program Office: (212) 678-3267
Email: dr.lisamiller@gmail.com
Website: www.tc.edu/ccp/Clinical

## Degrees Offered:

CLINICAL PSYCHOLOGY (CLIN)
Doctor of Philosophy (Ph.D.)
Master of Science (M.S.)- en passant

## Program Description:

The Clinical Psychology Program offers a course of scientist-practitioner education leading to the degree of Doctor of Philosophy (Ph.D.). The Master of Science (M.S.) and Master of Philosophy (M.Phil.) degrees are earned en passant.

Graduates from this program seek positions in teaching, research, policy, administration, and psychotherapy. Completing a 95 -point doctoral degree, including an internship, typically takes five to seven years. Practicum work is done in the Teachers College Dean Hope Center for Psychological and Educational Services (Director: Dr. Dinelia Rosa).

Our scientist-practitioner model means that we are dedicated to training students to generate new empirically-based knowledge in clinical psychology and to perform clinical work that is constantly informed by traditional and emerging scholarship in the field. We fully expect our students to learn to expertly produce, analyze, and present scientific material. We also expect our students to become proficient at providing clinical services to a diverse population.
Furthermore, we expect our students to learn to integrate these goals. Finally, we are committed to the belief that training as a clinical psychologist must be deeply rooted in psychology itself, its body of knowledge, methods, and ethical principles that form the basis and context of clinical research and practice.

Thus, the primary goal of the Clinical Psychology Program is to provide rigorous training in both contemporary clinical science and clinical assessment and intervention. The research programs of our faculty span a wide range, including studies of childhood risk and resilience; clinical intervention in diverse sociocultural and geographic contexts; religious and spiritual development; altruism and caregiving; emotion and coping with trauma; and psychotherapy process and outcome (see indi-
vidual faculty web pages). Our on-site clinic, The Dean Hope Center, now functions as both a research and clinical training center. The Center is currently participating in a nationwide study of client demographics, risk factors, and mental and physical health status.

Our clinical training has an ongoing psychodynamic tradition with increasing opportunities for supervision and didactic work in CognitiveBehavioral, Interpersonal, and other modalities. This training emphasizes intervention and assessment across the lifespan within the context of schools, families, and communities. We are committed to an enhanced focus on ethnic, cultural, and theoretical diversity not only in our curriculum and clinical training, but also among our students, faculty, and clinical supervisors. Numerous practica and externship opportunities are available throughout the New York area, and our students commonly secure placement at the most competitive internship sites.

It should be noted, however, that those students whose career goal is full-time private practice without a significant research commitment will find our program inappropriate for their needs. Increasingly, the program is emphasizing work in the child-clinical area. In fact, students may elect a specialty track in child-clinical psychology.

All Clinical Psychology doctoral students are staff members in the Dean Hope Center after their first semester in the Program and carry a regular caseload of clients. The Center sponsors a weekly case conference, at which students present and discuss cases. Clinical work is supervised by core faculty members or by adjunct faculty who are psychologists in private practice in New York. Students usually carry four clients as part of their psychotherapy practicum and receive two hours of supervision each week with two different supervisors.

## Special Application Requirements/Information:

## Doctor of Philosophy

1. A bachelor's degree from a regionally accredited college or university or its equivalent in another country is required. An applicant who applies while still an undergraduate can be accepted only on condition that the bachelor's degree be received in time for enrollment. The undergraduate transcript must include a course in statistics and at least nine additional credits from among the following areas, at least one of which should include a laboratory experience: personality, social psychology, developmental psychology, abnormal psychology, physiological psychology, learning
theory, psychology of perception, and experimental psychology. An applicant may be accepted with a deficiency in one of these areas on condition that the deficiency be remedied (either during the summer or without degree credit, during the first semester). Many, though not all of our accepted applicants have also received an M.A. degree in psychology.
2. Clinical and Research Experience: Though not required, the Program values the additional evidence of maturity, competence, and capacity for responsibility that comes from a broad range of work and life experiences. Most students admitted to the program have engaged, after college, in some type of supervised work in a clinical setting, as well as research that is commensurate with the interest of a faculty member in the program.
3. Graduate Record Examination (GRE): Applicants must submit the results of the GRE Aptitude tests taken no more than five years prior to the date of the application. Unless English is not the applicant's first language, scores on the Verbal and Quantitative tests and the Advanced Test of less than 650 will make acceptance less likely. On test retakes, the Admissions Committee will consider the higher scores. Applicants are urged to take the GRE no later than November.
4. References: Applicants must submit at least two letters of recommendation from individuals able to comment on their scholarly and personal qualifications.
5. Personal Statement: Applicants should try to say something about the range of their interests and experience, attempting to give the Admissions Committee a flavor of the person behind the application.

Applicants whose qualifications appear most promising are invited to a personal interview, usually in late February or early March. As a rule, no applicant will be accepted on the basis of an application alone. Applicants are interviewed by one student and one faculty member of the Admissions Committee. All material included in the admissions procedure is accorded professional confidentiality by the Committee. The fact that students submit their applications with this knowledge constitutes permission to have these materials read by both faculty and student members of the Committee.

Applicants for the doctoral program are considered for fall admission. For doctoral applicants, all admissions materials must be received by the final application deadline as advertised by the College. See the Admissions section of this bulletin for more information.

## Degree Requirements:

The Program requires:

1. The completion of 95 points of academic credit during three to four years of residence at the College.
2. A full-time, twelve month clinical internship during the fourth or fifth year of study. 3. An original piece of empirical research, which also serves as a qualifying paper, to be completed during the second year of study. 4. A passing grade on the certification examination (on Research Methods) during the third year of study.
3. A case presentation and accompanying paper during the third year, demonstrating the student's ability to integrate theory, research, and practice.
4. A doctoral dissertation, which must be completed no later than the seventh year after matriculation.

## First Year

During the first year of study, doctoral students typically take the following didactic courses: Ethical and professional issues in clinical psychology (CCPX 5030); Psychological measurement (HUDM 5059); Applied regression analysis (HUDM 5122); Research methods in social psychology (ORLJ 5040); Child psychopathology (CCPX 5034); Adult psychopathology (CCPX 5032); Research and clinical applications of DSM-IV (CCPX 5102); History and systems of psychology (CCPX 6020); and Dynamic psychotherapies (CCPX 5037). Students also take three semesters of psychological testing (CCPX 5330, CCPX 5333, CCPX 6531) and a course in clinical interviewing (CCPX 5539). Most students begin working with faculty members on research during the first year (CCPX 4900).

## Second Year

During their second year, students' didactic courses include: Brain and behavior I: Communication in the nervous system (BBS 5068); Linear models and experimental design (HUDM 5123); Emotion, culture, and health (CCPX 5020); Psychotherapy with children (CCPX 5531); Cognitive, behavioral, and interpersonal therapies (CCPX 5038); Clinical work with diverse populations (CCPX 5036); and Short-term dynamic experiential psychotherapy (CCPX 6530). In addition, stu-
dents sign up for a full year of research practicum with a faculty member (culminating in an empirical Second-Year Project), a full-year adult clinical practicum (CCPX 6335), and a one-semester child practicum (CCPX 5334).

## Third Year

Third-year didactic courses include Group dynamics: A systems perspective (ORL 5362); Empirical bases of psychotherapy (CCPX 5039); and Dissertation seminar (CCPX 7500). There is also a full-year advanced clinical practicum (CCPX 6336). Most students elect to take a full-year clinical externship (CCPX 5230); and many also elect a full-year family therapy practicum (CCPJ 6363).

## Fourth and Fifth Year

Fourth year features a practicum (CCPX 6338) focused on clinical work as well as a practicum (CCPX 6332-6333) that offers opportunities to supervise beginning trainees. Fourth year is also devoted to extensive work on the dissertation. Year five is usually spent on a full-year clinical internship (CCPX 6430).

Elective courses are for all students and include Introduction to forensic psychology (CCPX 4150); Psychotherapy through fiction and film (CCPX 4120); Women and mental health (CCPX 4125); Psychology of loss and trauma (CCPX 4060); Psychotherapy, religious diversity, and spirituality (CCPX 5045).

The program allows only 12 points of graduate work from another institution to be transferred. No transfer credits are awarded for practica, workshops, or independent study.

Financial Aid
Teachers College has three scholarship funds: General, Minority, and International Student. The College also arranges a variety of student loans with banks, most of them repaymentand interest-deferred. Limited work study funds may also be available.

Since 1993, the Clinical Psychology Program has also granted partial scholarships via the James S. Scappaticcio Fellowship for Gay Men and Lesbian doctoral candidates in Clinical Psychology. Tuition grants are available for one or two "self-identified gay clinical doctoral candidates"; small grants-in-aid are also made available for research on topics relevant to homosexuality, including psychological and/or psychosocial aspects of AIDS or HIV treatment. Since 2005, the program has also granted one to two partial scholarships for students in the child-track via the Jodi Lane Scholarship Fund. Priority is given to those students study-
ing psychological disorders in children. The program currently does not have NIMH-funded traineeships to offer. Most doctoral students with significant financial need obtain help in the form of a tuition scholarship that covers approximately $25-50 \%$ of the cost of a year's tuition; some also receive stipends from faculty research grants. Most students also work parttime to cover expenses.

## COURSES:

Note that 4000 -level courses are generally open to non-majors, as are certain 5000 -level courses. See listings below for prerequisites and limitations on enrollment.

## CCPX 4000. Introduction to applied

 psychology (3)Faculty. This course is designed to provide an introduction to multidisciplinary approaches to mental health including clinical psychology, school psychology, and pediatric psychology.

CCPX 4010. Social problems for clinical psychologists (3)
Professor Midlarsky. Psychological perspectives on social problems such as eating disorders, domestic violence, AIDS and HIV infection, and mental health in late life.

CCPX 4030. Psychology of adjustment (3)
Professor Bonanno. Healthy and pathological adjustment throughout the lifespan: stress, defense mechanisms, and coping.

CCPX 4032. Assessment and treatment of alcohol and chemical dependency (3) Dr. Rudolph. Overview of the clinical principles governing assessment and treatment of addictive disorders; stages of addiction; issues of comorbidity; resistances to treatment.

CCPX 4033. Advanced clinical interventions with addicted patients and families (3) Faculty. Permission required. Prerequisite: CCPX 4032. Focus on developing advanced alcohol-specific intervention techniques, and group and family counseling skills for work with addicted individuals and their families.

## CCPX 4035. Personality and behavior

 change (3)Faculty. Review of the major theories of personality; mechanisms of behavioral change.

## CCPX 4036. Psychology of human

intimacy (3)
Dr. Kuriansky. Overview of issues in the fields of interpersonal relationships and sexuality: developmental theories, dating and mating, gender differences and similarities, sexual behaviors and sexual victimization.

CCPX 4037. Introduction to cognitive behavior therapy (CBT) (3)
Professor Verdeli. Overview of the essential principles and techniques of CBT for mood and anxiety disorders.

CCPX 4038. Comparative psychotherapies (3) Faculty. Survey and analysis of representative psychotherapies in current practice: psychoanalytic, neo-Freudian, Gestalt, Jungian, clientcentered, existential, behavior therapy, and others.

CCPX 4039. Nontraditional psychotherapies (3)
Dr. Menahem. Overview and evaluation of nontraditional treatment approaches including existential, Jungian, spiritually-oriented, holistic, and transpersonal psychotherapies, Ericksonian hypnosis, and Eastern-oriented models.

CCPX 4040. Introduction to psychological testing and assessment (3)
Faculty.
CCPX 4060. The psychology of loss and trauma (3)
Professor Bonanno. Focus on how humans cope with significant losses and trauma: historical developments, recent empirical advances, cross-cultural variations, and clinical and social implications.

CCPX 4120. Psychotherapy through fiction and film (3)
Professor Farber. Psychotherapy, the therapist, and psychopathology as reflected in current fiction and film.

CCPX 4121. Psychological themes in classic literature (3)
Faculty. Understanding personality, motivation, conflict and psychopathology, through critical analyses of classic literature, including works by Shakespeare, Dostoyevsky, Doctorow, and Woolf.

CCPX 4125. Women and mental health (3) Dr. Nereo. Stressors, manifestations, and treatment of psychopathology in women; theories of Klein, Horney, Thompson, and others.

CCPX 4126. The mother-child matrix: Developmental and clinical implications (3) Professor Miller. The mother-child relationship: Implications for development and influence on clinical theory and practice, focus on theories of parenting, ruptures in the relationship and therapy with mothers and children.

## CCPX 4150. Introduction to forensic

 psychology (3)Dr. Owen. The practice and application of forensic psychology to medical-legal problems and nomenclature in diagnosis, evaluation, assessment, treatment, and testimony regarding criminal behavior, psychopathology, and civil, family, and criminal law.

## CCPX 4230. Fieldwork in applied

## psychology (3)

Dr. Cooper. Supervised practice in field placements for M.A. students in applied or general psychology.

CCPX 4542. Introduction to contemporary psychoanalytic thought (3)
Dr. Kosseff. Examination of current psychodynamic ideas, including object relations theory, self-psychology, theories of narcissism, borderline pathology, and the nature of the therapeutic relationship.

CCPX 5020. Emotion, culture, and health (3) Professor Bonanno. This course covers the impact of overwhelming emotions on human health and self-regulatory responses. The role of culture in these responses is explored, as well as historical context and theoretical perspectives.

CCPX 5030. Ethical and professional issues in clinical psychology (1)
Dr. Khan. Limited to doctoral students in clinical psychology. Orientation to program and field; ethical and professional issues.

CCPX 5032. Adult psychopathology (3)
Professor Midlarsky. Major clinical disorders of adulthood viewed from clinical and research perspectives; current issues in diagnosis and treatment.

## CCPX 5033. The evolution of Freud's

 psychological theories (3)Faculty. Intensive examination of selected psychological works of Sigmund Freud from 1892 to 1940, focusing on theoretical innovations, modifications, and elaborations.

CCPX 5034. Child psychopathology (3) Professor Farber. Major clinical syndromes of childhood and adolescence viewed within the context of normal development. Consideration of various theoretical, diagnostic, etiological, and therapeutic viewpoints. Fall semester: doctoral candidates in psychology; others by permission (prerequisite: CCPX 4542). Spring, Summer semesters: Open to all.

CCPX 5036. Clinical work with diverse populations (3)
Dr. Rosa. Permission required. An experiential seminar for practicum students in Clinical and Counseling Psychology who are working with clients different from themselves.

CCPX 5037. Dynamic psychotherapies (3) Dr. Blumberg. Open to doctoral candidates in psychology; others by permission (prerequisite: CCPX 4542). Theories of psychoanalytic psychotherapy with emphasis on original sources: Freud, Winnicott, Kohut, ego psychology, and object relations theory.

## CCPX 5038. Cognitive, behavioral,

 and interpersonal therapies (3)Professor Verdeli. Open to doctoral candidates in psychology, others by permission. Introduc-
tion to theory and technique underlying treatment within the following modalities: Cognitive, Behavioral, Interpersonal, and ShortTerm Psychodynamic. The course will explore the application of these various treatment approaches to a range of disorders including depressive disorders, anxiety disorders, OCD, and schizophrenia.

CCPX 5039. Empirical bases of
psychotherapy (3)
Professor Farber. Open to doctoral candidates in psychology; others by permission. (Prerequisite: CCPX 4038). Analysis of research efforts concerned with investigating the process and outcome of psychotherapy. Emphasis on client, therapist, and system variables that contribute to the probability of therapeutic success.

CCPX 5040. Development and psychopathology: Atypical contexts and population (3)

Faculty. Using contemporary research as the basis, the focus is on the interface between classical developmental psychology theories and patterns of development identified in atypical contexts (e.g., poverty) and among atypical populations (e.g., resilient youth). Implications for interventions and policy are also discussed.

CCPX 5045. Psychotherapy, religious diversity, and spirituality (3)
Professor Miller. This course will focus on the role of religion and spirituality in psychotherapy. Research, theory and case material will be used to clarify healing dimensions of religion and spirituality. Discussion will focus on a reexamination of models of psyche and goals of treatment.

## CCPX 5102. Research and clinical applications of DSM-IV (3)

Dr. Wright. Diagnostic, clinical, and research applications of the DSM-IV; ethical, cultural, and gender issues in the diagnostic process.

## CCPX 5230. Fieldwork in clinical

 psychology (0-1)Professor Midlarsky. Limited to doctoral candidates in clinical psychology. Supervised practice in field placements.

## CCPX 5330. Principles and techniques

 of clinical assessment (3)Dr. Wright. Limited to doctoral candidates in Clinical, Counseling, and School Psychology. Theory and practice of psychological testing; focus on cognitive assessment.

CCPX 5333. Practicum in clinical assessment (3)
Dr. Wright. Permission required. Didactic focus on personality assessment, including projective measures; supervised practice in comprehensive psychological assessment as staff member of the Dean Hope Center.

## Counseling and Clinical Psychology

CCPX 5334. Practicum: Clinical work with children and adolescents (3) Dr. Pivnick. Limited to doctoral candidates in Clinical, Counseling, and School Psychology. Psychological assessment of children and adolescents, including interviewing techniques, observational methods, and psychodiagnostic testing.

CCPX 5531. Psychotherapy with children (3) Dr. Bodner. Open to doctoral students in psychology; others by permission. Introduction to contemporary models of child psychotherapy. Emphasis will be upon a comparison of the theoretical foundations and techniques across paradigms.

CCPX 5532. Clinical issues: Families
from diverse backgrounds (3)
Professor Miller. Focus on current research on risk and resiliency factors developed from within epidemiological, social, and intra-psychic perspectives. Research findings are considered within the context of theories of development.

CCPX 5533-CCPX 5534. Research methods in clinical psychology ( 3 each semester) CCPX 5533: Professor Bonanno. CCPX 5534: Faculty. Permission required. Design, methodology, and artifact in research. Development of research proposals. Critical review of journal articles.

CCPX 5535. Research practicum in clinical psychology (2)
Faculty. Permission required. Supervised research in clinical psychology.

CCPX 5539. Clinical assessment:

## The interview (3)

Dr. Rosa. Doctoral students in Clinical, Counseling, School Psychology, speech and hearing, learning disabilities, special education, and pre-doctoral students providing intake services at the Dean Hope Center. Introductory didactic and practice seminar in clinical interviewing.

CCPX 5544. Cross-cultural issues in psychopathology, resilience, and coping (3) Faculty. Examination of pathology and resilience in the context of cultural patterns of coping with developmental lifetasks and reactions to stress.

CCPX 5546. Research perspectives on critical social problems (3) Professor Midlarsky. Open to master's and doctoral students. Exploration of research based upon the interface of social and clinical psychology and development projects. Topics include eating disorders across the lifespan, altruism and mental health, coping with the aftermath of genocide, terror, personal growth in the wake of trauma, and effects of disability on the individual and family.

CCPX 5610. Clinical psychology colloquium (0)
Professor Farber (Coordinator), Clinical faculty and guest speakers. Permission required.

CCPX 5630. Case conference (0)
Dr. Rosa (Coordinator). Permission required.
Corequisite: CCPX 5333, CCPX 6335, CCPX 6336, CCPJ 5360, CCPJ 6360, or CCPJ 6364. For practicum students in the Dean Hope Center. All trainees must attend at least five conferences each term.

CCPX 6020. History and systems of psychology (3)
Dr. Wright. Survey of the history of psychology from the ancient Greeks to the present. Discussion of theoretical systems including Associationism, Structuralism, Behaviorism, Psychoanalysis, and Existentialism.

CCPX 6332-CCPX 6333. Practicum in clinical supervision (1-3)
Dr. Wright. Permission required. Seminar and supervised practice in the teaching and supervision of clinical assessment and intake.

CCPX 6335. Practicum in clinical intervention ( $3-4 ; 0-1$ during summer) Professor Farber. Permission required. For second-year doctoral students in clinical psychology, two semesters, 3-4 points each semester. Supervised practice in psychotherapy as staff members of the Dean Hope Center.

CCPX 6336. Advanced practicum in clinical intervention (3-4; 0-1 during summer) Dr. Geller. Permission required. Prerequisite: CCPX 6335. For third-year doctoral students in Clinical Psychology.

CCPX 6338. Fourth-year practicum in clinical intervention (1)
Dr. Rosa. Permission required. Prerequisite: CCPX 6336. For fourth-year students in clinical psychology, two semesters, (1 point each semester).

CCPX 6430. Internship in clinical psychology (0)
Faculty. For advanced doctoral students in clinical psychology. Experience under supervision in approved mental health agency. One year full-time or part-time equivalent.

CCPX 6530. Experiential and short-term dynamic psychotherapy (3)
Dr. Kentgen. Permission required. For doctoral students in clinical, counseling, and school psychology. Focus on theoretical and technical aspects of short-term therapy; key concepts illustrated by clinical material presented by instructor and students.

CCPX 6531. Psychological assessment and clinical practice (2)
Dr. Wright. Permission required. Prerequisites: CCPX 5330, CCPX 5333. Emphasis on the interpretation of projective tests, and on the integration and reporting of multiple sources of assessment data.

## CCPX 6532-CCPX 6533. Advanced topics

 in clinical theory, research, and practice (2-3) Clinical faculty and invited instructors. Advanced doctoral candidates in Clinical and Counseling psychology; other candidates by permission (different sections may have different criteria). Seminars for the intensive study of specialized areas of theory, research, and practice for advanced students. Content varies.CCPX 6534. Object relations and self psychology (3)
Faculty. Permission required. British and American schools of object relations; discussion of the role of such clinical phenomena as internalization, splitting, regression, and projective identification.

## Independent Study and Research

Students may register for intensive individual study of a topic of special interest. Registration in independent study (CCPX 4900 and CCPX 6900) is by permission of the instructor under whose guidance the work will be undertaken. Credit may range from 1 to 3 points each term, and registration is not limited to one term. Hours for individual conferences are to be arranged.

## CCPX 4900. Research and independent

 study (1-3)Faculty. Permission required.
CCPX 5110. Research apprenticeship (0-2)
Faculty. Permission required. Involvement as a research extern in community agencies or as a research assistant to departmental faculty.

CCPX 6900. Advanced research and independent study (1-3)
Faculty. Permission required.
CCPX 7500. Dissertation seminar (0) Faculty. Permission required. Development of doctoral dissertations and presentation of plans for approval. Registration limited to two terms.

CCPX 8900. Dissertation advisement (0) Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate of each term.

## COUNSELING PSYCHOLOGY

Director of Training:
Professor George V. Gushue
Program Office: (212) 678-3397
Website: www.tc.edu/ccp/CounPsych

## Degree Offered:

COUNSELING PSYCHOLOGY (COUN)
Doctor of Philosophy (Ph.D.)

## Program Description:

The Ph.D. Program in Counseling Psychology reflects a scientist-practitioner training model whereby emphasis is placed on preparing professional psychologists who:
(a) are competent in addressing problems associated with the adaptive functioning of human beings,
(b) can successfully apply relevant research literature to client concerns, and
(c) can contribute to the research knowledge base.

Our philosophy is consistent with many of the historical traditions in the field of counseling psychology, including (a) the optimal development and functioning of individuals, groups, and other systems (e.g., institutions, communities); (b) an appreciation of the strengths and uniqueness of individuals; (c) a belief in the unbounded potential of human beings; and (d) a respect for the integrity of all people. Our training philosophy strongly encourages students to adopt approaches to client treatment that consider the various contexts in which clients develop and operate. The Program also stresses the critical roles of selfexploration and personal reflection as components of professional development.

Central to our training model is the belief that academic scholarship and research are inseparable from professional practice. Hence, the Counseling Psychology Program recognizes the importance of preparing graduates who manifest the highest standards of excellence in academic or service delivery settings. Throughout the Program, we emphasize the integration of scientific psychology and professional practice through attention to didactic and experiential learning, synthesizing skill acquisition with effective use of self, and clarifying personal and professional identities. This integrative perspective implies the following assumptions:

1) Learning is an ongoing process and, as a result, students are responsible for being cognizant of issues and trends within the profession;
2) Learning occurs in a context that requires active consideration of individual differences and systemic factors; and
3) Professional development is often inseparable from personal growth.

Thus, students are continuously exposed to opportunities to examine the connection between scientific knowledge and professional practice. To highlight the importance of this integration, education and training in theory, inquiry, and practice occur concurrently throughout the Program.

The academic curriculum of the Program provides students with numerous opportunities to develop professional and personal competencies associated with becoming counseling psychologists. In particular, extensive coursework, practical experiences, and other learning opportunities allow students to identify their strengths and assets with regard to their personal and professional development, and take risks to develop new competencies in various professional roles. The academic curriculum also reflects the importance of students (a) developing professional identities as a ethical counseling psychologists, (b) being socialized into the profession of counseling psychology, and (c) contributing to counseling psychology as a specialty discipline as well as to the broader field of applied psychology.

The Counseling Psychology Program is also firmly committed to issues pertaining to multicultural diversity, and seeks faculty members, staff, and students who reflect such diversity, including, but not limited to, race, ethnicity, gender, age, sexual orientation, socioeconomic status, religious/spiritual orientation, disability status, and national origin. Moreover, issues of human diversity are largely integrated throughout the entire curriculum and, indeed, throughout the entire program in that students are actively exposed to numerous opportunities to develop competence in addressing issues pertaining to cultural and identity group membership with various populations. The Program also seeks to create a milieu of growth, collaboration, and collegiality among faculty, staff, and students with regard to respecting and affirming various dimensions of cultural diversity.

Thus the specific goals of the program and their associated competencies prepare students to work in a variety of settings with emphasis on education (e.g. colleges and universities), health (e.g., outpatient clinics, hospitals, nursing homes etc.) and related agencies. With the help of a Faculty Advisor, students register for required and elective courses, which in light of their previous preparation, special needs, and
career objectives, will prepare them appropriately. Depending on their area of concentration and level of training, graduates have found employment in universities, colleges, medical schools, elementary and secondary schools, adult basic education centers, employment and training centers, rehabilitation centers, hospitals, mental health centers, industry, senior citizens centers, and community and government agencies.

Regardless of the eventual work setting, students in the Program are expected by the end of their training to have achieved the following objectives:

1. Be capable of engaging in culturally-relevant and psychologically appropriate psychotherapeutic interventions that (a) emphasize normal personal and interpersonal functioning, (b) address dysfunction from a strengths-based perspective, (c) consider developmental issues across the lifespan, and (d) consider the role of environmental and contextual issues in individuals' lives.
2. Be competent in conducting research and effectively applying research to their professional work.
3. Possess the requisite foundations in core areas of professional psychology.
4. Be ethical scientist-practitioners.
5. Be socialized into the profession and able to contribute to counseling psychology as a specialty discipline, as well as to the broader field of applied psychology, through research, scholarship, conference presentations, and service.
6. Demonstrate an understanding of persons, groups, and organizations in their environmental contexts, including cultural, social, economic, educational, occupational, and institutional contexts.
7. Demonstrate multicultural competence in research and practice.
8. Be able to work in a variety of professional practice settings.

## Special Application Requirements/Information:

An undergraduate major in psychology or one of the other social or behavioral sciences is desirable but not essential. It is expected that the personal statement which accompanies the student's application will show a realistic assessment of the student's professional interests and goals, as well as how she/he fits with the doctoral program's training objectives.

Applicants for the doctoral program are considered for fall admission only. For doctoral applicants, all admissions materials must be

## Counseling and Clinical Psychology

received by the final application deadline as advertised by the College. See the Admissions section of this bulletin for more information.

## Doctoral Program Applications:

Doctoral applicants must submit all credentials, along with their scores on the Graduate Record Examination General (Aptitude) Test by the application deadline. Doctoral applicants also are required to submit a copy of a recently completed paper on a topic of interest to them. This may be, but does not have to be, a paper submitted to satisfy course requirements. Admissions decisions are made once a year. All admissions materials must be received by the final deadline. See the Admissions section of this bulletin for more information.

Although admission to the Ph.D. program requires final acceptance by the Columbia University Graduate School of Arts and Sciences, as well as Teachers College, the administrative details for this process are managed via the Teachers College Admissions Office. Applicants should not submit an application to the Graduate School of Arts and Sciences. The Graduate School of Arts and Sciences requires that applicants have a baccalaureate degree with 90 points of liberal arts credit.

Preference is given to candidates with excellent verbal and quantitative skills whose transcripts, references, performance in an admissions interview, and previous work experience suggest that they have the potential to make a significant contribution to theory, research, practice, or policy-making.

Experience has shown that the doctoral program may not be the most appropriate program of study for students who wish to become psychotherapists. Applicants who are so motivated are advised to seek admission to the Ed.M. program in Psychological Counseling or to a different doctoral program in professional psychology.

## Degree Requirements:

The program of study that follows is described in terms of full-time study. Some of the courses may be taken on a part-time basis. However, full-time study after the first 30 applicable credits is required unless the student can present persuasive evidence that his or her living and working circumstances have not prevented and will not prevent him/her from taking full advantage of the College's resources. Certain essential subjects and practica are offered only in the morning and early afternoon hours.

The doctorate is granted after successful completion of a minimum of 90 points of planned, sequential study beyond the bachelor's degree, of which at least 60 points must be taken at Teachers College. The doctoral program is accredited by the American Psychological Association and requires at least five years, including the equivalent of four years of academic study beyond the bachelor's degree and one calendar year of internship.

Please note that upon admission to the Ph.D. program in Counseling Psychology, students will receive a Doctoral Student Handbook for the Ph.D. program in Counseling Psychology which will provide updated policy, program features, and requirements (The most recent handbook is available on the program website). The program of study leading to the doctorate in Counseling Psychology is guided by criteria adopted by the American Psychological Association for accredited programs in professional psychology.

The course of studies includes: scientific and professional ethics and standards; psychological measurement, statistics, and research design and methodology; knowledge and understanding of: (a) history and systems of psychology, (b) the biological basis of behavior, (c) the cognitive-affective bases of behavior, (d) the social bases of behavior (e.g., social psychology), and (e) individual behavior (e.g., personality theory and human development), intervention strategies and methods of inquiry; and preparation to undertake a doctoral dissertation.

In developing the necessary mastery of these areas, the student is expected to be attentive to the historical roots of counseling psychology, i.e., the study of individual differences, the vocational guidance movement and the mental health movement. Similarly, she or he is expected to be prepared for the probable future of counseling psychology in the areas of expertise represented by the faculty, especially the influence of social and cultural systems (home, family, workplace, and environment) on human development and change.

In addition to core requirements, courses in specific and specialized areas of counseling psychology are available. Courses in the department are supplemented by appropriate offerings in other programs and departments at Teachers College and Columbia University.

Please note that satisfactory performance in the program is defined as no incomplete grades and no courses in which the grade
earned is lower than B. Academic dishonesty and unethical behavior may be grounds for immediate dismissal from the program (master's or doctoral). Specific information regarding curriculum requirements are contained in the Doctoral Student Handbook. In addition to coursework, a number of other academic experiences are required.

## Doctoral Certification

Candidacy as a doctoral student expires after a certain number of years. Ph.D. candidates must complete all degree requirements within seven years of first entering the program (six years if they have an applicable master's degree or 30 points of advanced standing prior to doctoral admission).

Counseling Psychology students do not become official candidates for the degree of Doctor of Philosophy until they have passed 1) a College-Wide Psychology Research Methods Exam, and 2) a Program Comprehensive exam which includes both a written exam and the submission of a Research Competence project paper. The written exam covers several areas in Counseling Psychology, including: (1) theoretical concepts; (2) core psychology course work; (3) clinical interventions; (4) assessment in career work and personal/social counseling; (5) professional issues such as ethics, professional trends, and developments in counseling psychology. Cultural issues will be infused into the content questions in the exam. In addition, they must satisfy all other requirements for certification prescribed by the Office of Doctoral Studies. Students who fail to take the certification examination at the appropriate point in their studies are subject to certain penalties. Also there are annual evaluations done annually to facilitate students' timely completion of the Ph.D. degree (See Doctoral Student Handbook for more information).

## Practicum and Externship

Practicum placements are available both oncampus and off-campus. The Dean Hope Center for Educational and Psychological Services (CEPS) is an in-house training clinic located at 657 Thorndike Hall. Students may petition program faculty to complete practicum placements off-campus and should contact the Fieldwork Coordinator for further information. A year-long externship placement may be required of students who do not obtain sufficient clinical hours during their practicum rotations.

Internship
For doctoral students only. Supervised experience in approved and appropriate agencies,
institutions, and establishments. Students are required to petition faculty for internship training and must be approved to apply for internship. Students must have completed all coursework during the academic year in which they are applying for internship. Students must have passed all certification and comprehensive examinations as well as have an approved dissertation proposal.

## The Dissertation

For most doctoral students, the completion of course requirements presents few problems. Successful completion of a dissertation is usually less easily managed. Unless carefully planned in advance, it can prove a difficult hurdle. Accordingly, the program has several built-in features designed to facilitate the formulation and successful execution of an acceptable dissertation proposal and assistance in completing the dissertation. These include the completion of a research competence project, the Dissertation Seminar course, and a Review of Research course.

## COURSES:

Courses at the 4000 level do not usually require permission of the instructor and are open to majors as well as non-majors. Many $5000-$ level courses also are open to non-majors with appropriate background; 6000-level courses are usually limited to majors with advanced standing in the program. See listings below for prerequisites and limitations on enrollment. In addition to the courses listed below, students should consult the offerings of other psychology programs in this catalog.

## CCPJ 4000. Multicultural psychopathology

 (3)Faculty. Introduces students to the manifestation, etiology, assessment, and treatment of mental disorders. Special attention is paid to how racial, cultural, gender and other sociocultural variables influence the manifestation of psychopathology. Discussion of the uses of DSM in the assessment and diagnosis of mental disorders will be emphasized.

## CCPJ 4061. Principles and practices

 of vocational rehabilitation (2-3) Faculty. History and legislation, principles, settings, major issues.CCPJ 4062. Medical aspects of disabilities and rehabilitation (2-3) Faculty. Limiting aspects of the major physical and emotional disabilities. Understanding and using medical knowledge in rehabilitation counseling.

CCPJ 4064. Theories of counseling (3) Faculty. Approaches to counseling; theories and research findings; educational, vocational, and personal counseling; typical problems; illustrative cases.

CCPJ 4065. Career development
of women (2-3)
Faculty. Applicability of existing theories of vocational choice and adjustment to the career development of women. New and emerging concepts, theories, and research findings. Psychological, sociological, and economic factors which facilitate or impede the career development of women.

CCPJ 4066. Foundations of testing and accountability (3)
Faculty. Introduces students to foundational concepts/skills in testing, emphasizing the principles of design, selection, validation, and appropriate use of formal and informal assessment tools for classroom instruction and various other practice-based, research, clinical, and/or accountability contexts. The course is particularly geared towards educational practitioners and other professionals who use data from assessments to inform their day-to-day practices or for research.

CCPJ 4068. Counseling women (2-3) Faculty. Emphasis on the factors that influence the familial and intrapsychic issues of women. The integration of theories provides a framework for understanding the implications of women's development for counseling and psychotherapy.

## CCPJ 4160. School counseling for

 children and adolescents (3)Faculty. Principles and practices in the guidance of children and adolescents examined from a multidisciplinary and multicultural perspective with special emphasis on facilitating developmental processes of school, family, and community contexts. The role of the Guidance Counselor in developing preventive and rehabilitative interventions in urban and suburban schools/communities will be considered. Special fee: $\$ 15$.

CCPJ 4165. Consultation in community agencies and resources (2-3)
Faculty. Community services and programs in family and personal counseling, health and child care, mental health, career counseling, job placement, and service to the aged.

## CCPJ 4166. Current issues in gerontology

 (2-3)Faculty. Current and emerging emphases in theory, research, and practice. Registration not limited to one term. Topics are announced in the course schedule distributed each semester.

## CCPJ 4560. Professional and ethical issues

 in psychological counseling (3)Faculty. Professional orientation for Ed.M. students in psychological counseling. Ethics and professional issues; employment opportunities and work settings (masters only).

## CCPJ 4873. The Winter Roundtable

on cultural psychology and education (1)
Faculty. An annual national conference where top leaders in education and psychology share their expertise.

CCPJ 5020. Racism and racial identity in psychology and education (3) Faculty. A review of the debate on the influence of race and racism on education, mental health, and other social sciences. Introduction of current theoretical and research developments which explore the influence and role of racial identity (black and white) in individual development and professional practice.

## CCPJ 5025. Group counseling (3)

Faculty. Prerequisite: Admission into the Ed.M. program in Psychological Counseling or Ph.D. program in Counseling Psychology; CCPJ 4064, CCPJ 5371. Students will explore the functions of group counseling in meeting client needs. Emphasis will be placed on theory and principles of group process and on the development of group skills through participation in class role-plays and in a group counseling experience. Attention to the practice of effective group leadership will also be addressed.

## CCPJ 5060. Assessment in counseling

 psychology (2-3)Faculty. The course is designed to provide an overview of the basic principles, theories, issues and practices in the field of psychological testing. Tests of both cognitive and personality functioning will be included, with emphasis on identification of both problems and strengths. Special fee: $\$ 40$.

CCPJ 5061. Assessment in counseling psychology (1-3)
Faculty. Open only to doctoral students in Counseling Psychology. Students will explore a range of contemporary issues in testing and will also receive supervised testing experience in a hospital or clinic. This course is offered in the spring only for the students who have completed CCPJ 5060.

CCPJ 5062. Career counseling and development (3)
Faculty. General concepts of career development and methods of assessment in career counseling. This course also highlights various issues related to the career development of diverse client populations in light of contemporary socio-political phenomena. Materials fee: \$40.

CCPJ 5063. Psychological and cultural aspects of disability and rehabilitation (2-3) Faculty. Personality theory and physical disabilities. Personality and environmental variables in the adjustment and rehabilitation process.

## CCPJ 5064. Marriage and family therapy:

 Theory and practice (3)Faculty. Open to majors in counseling and clinical psychology and to others with appropriate backgrounds. The course focuses on the relationship between self and system. Integrative theory models based on systemic thinking are explored. Family systems approaches relevant to working with individual adults,

# Counseling and Clinical Psychology 

children, couples, and families are studied. Illustrative cases are presented and discussed.

CCPJ 5065. Psychology of the undergraduate: Issues for counseling and psychology (3) Faculty. Theory and research on the psychological development of women and men. Focus on intellectual, psychosocial, moral, and vocational development with attention to the needs of special student groups and to the campus context and climate. Institutional structures and responses. Issues for counseling and education.

## CCPJ 5161. Counseling and normal aging

 (2-3)Faculty. Exploration of factors impacting on psychological treatment for normative problems of later adulthood, such as physical illness and retirement, and survey of interventions designed to address these problems.

CCPJ 5162. Counseling and psychopathology in older persons (2-3)
Faculty. Exploration of factors impacting on psychological treatment of serious psychological dysfunctioning in later life, such as senile dementia and clinical depression, and survey of interventions designed to address these problems.

## CCPJ 5164. Multicultural counseling

 and psychology (3)Faculty. Introduces students to a range of approaches used in psychology and other disciplines for developing therapeutic interventions across diverse racial, cultural, and linguistic groups. Examination of culturally indigenous perspectives of and approaches to mental health and healing. Introduction to culturally based counseling methods.

CCPJ 5165. Racial-cultural counseling laboratory (4)
Faculty. Permission and application required. Prerequisites: Admission into the Ed.M. program in Psychological Counseling or Ph.D. program in Counseling Psychology; CCPJ 4064, CCPJ 5371, CCPJ 5025, and either CCPJ 5020 or CCPJ 5164. An advanced experiential skill-oriented and didactic course with limited enrollment (30) intended to provide insights into the racial, social, and cultural factors in the development of relationships in counseling. The course uses a minimum competence model focused on self-exploration and the use of counseling skills.

## Relevant Courses in Another Department Taught by Counseling Faculty

ITSF 5123. School counseling of bilingual/bicultural children (3) Faculty. See the Department of International and Transcultural Studies for course description.

## Fieldwork and Internships

CCPJ 5260. Fieldwork in psychological counseling and rehabilitation (2-4)
Faculty. Limited to second-year students in Ed.M. program in Psychological Counseling. Required: Written application by the last Wednesday in September for spring and summer and by the first Wednesday in February for fall and permission of the instructor. Prerequisites: CCPJ 4064, CCPJ 5025, CCPJ 5062, CCPJ 5371 and either HUDK 4022, 4023, 4024, or HUDK 5029 (or approved substitutes). Supervised experience in various types of social agencies, rehabilitation agencies, career counseling centers, business establishments, educational institutions, and facilities serving the elderly. Normally a minimum of two semesters is required at 2 points per term. Additional points of credit may be added only with the approval of the instructor.

## CCPJ 5263. Supervised fieldwork in

 elementary school counseling (2-4)Faculty. Limited to second-year students in Ed.M. program in Psychological Counseling specializing in elementary guidance. Required: Written application by the last Wednesday in September for spring and summer and by the first Wednesday in February for fall and permission of the instructor. Prerequisites: CCPJ 4064, CCPJ 5025, CCPJ 5062, CCPJ 5371; and either HUDK 4022, 4023, 4024 or HUDK 5029 (or approved substitutes). Normally, a minimum of two semesters is required at 2 points per term. Additional points of credit may be added only with the approval of the instructor. Special fee: $\$ 20$.

CCPJ 5265. Supervised fieldwork in secondary school counseling (2-4)
Faculty. Limited to second-year students in Ed.M. program in Psychological Counseling specializing in secondary guidance. Required: Written application by the last Wednesday in September for spring and summer and by the first Wednesday in February for fall and permission of the instructor. Prerequisites: CCPJ 4064, CCPJ 5025, CCPJ 5062, CCPJ 5371; and either HUDK 4022, 4023, 4024 or HUDK 5029 (or approved substitutes). Normally, a minimum of two semesters is required at 2 points per term. Additional points of credit may be added only with the approval of the instructor. Special fee: $\$ 20$.

CCPJ 6260. Advanced fieldwork (2-6)
Faculty. Permission required. Limited to advanced students in the Ed.M. program in Psychological Counseling who have completed the regular fieldwork sequence in their area of concentration. Registration not limited to one semester.

## CCPJ 6460. Internship in counseling

 psychology (0-6)Faculty. Permission required. For doctoral students in counseling psychology only. Supervised experience in approved and appropriate
agencies, institutions, and establishments. Students are required to petition faculty for internship training to be approved to apply for internship. Students must have completed all coursework during the academic year in which they are applying for internship. Students would have to have passed all certification and comprehensive examinations as well as to have an approved dissertation proposal.

## Practica

CCPJ 5360. Practicum in career and personal counseling (4)
Faculty. Limited enrollment. Required: written application by June 1 for either semester of the next academic year, permission of the instructor, and concurrent registration for CCPX 5630. Prerequisites: CCPJ 4064, CCPJ 5062, CCPJ 5371, CCPJ 5025; and either HUDK 4022, 4023, 4024 or HUDK 5029 (or their equivalents). Limited to second-year students ( 30 or more points) admitted to the Ed.M. program in Psychological Counseling or doctoral students in counseling psychology. Supervised practice in vocational appraisal and short-term educational and personal/career counseling. Students work with clients of the Dean Hope Center. Special fee: $\$ 115$.

CCPJ 5364. Advanced practicum in multicultural counseling and psychotherapy (1-2) Faculty. Course will involve a weekly seminar, client assignments with individual supervision, and discussion of culturally relevant clinical interviews. Prerequisites: CCPJ 4064, CCPJ 5025, CCPJ 5062, CCPJ 5371, and either HUDK 4022, or HUDK 4023 or HUDK 4024. Open only to doctoral students in counseling psychology.

CCPJ 5368. Supervision and teaching of counseling (0-2)
Faculty. Permission required. Prerequisite: Successful completion of appropriate practica in individual and/or group counseling. Experience in practicum supervision and related teaching activities under the guidance of a faculty member. Enrollment not limited to one term.

CCPJ 5371. Foundations of counseling (3) Faculty. Permission required. Limited enrollment. Prerequisite: For majors section, admission into the Ed.M. program in Psychological Counseling or Ph.D. program in Counseling Psychology, CCPJ 4064 completed or taken concurrently; for non-majors section, CCPJ 4064 recommended but not required. A laboratory experience for counselors and others in the helping professions. Practice in clarifying, understanding, and responding to personal communications. Graduated exercises and videotapes are used to develop counseling and interviewing skills and desirable counselor attitudes. Special fee: $\$ 30$.

CCPJ 5372. Foundations of counseling skills II (3)
Faculty. Permission required. Limited Enrollment. Continuing laboratory experience for helping professionals in further development of basic counseling skills with emphasis on increasing one's self-awareness and self-reflective ability. Practice and experience in attending, influencing and helping skills through inclass discussions, experiential activities, weekly journals, and counseling/clinical integration. Exploring assets and defenses that may facilitate or hinder therapeutic transactions.
*CCPJ 6330. Basic practicum in individual counseling and psychotherapy (2-4) Faculty. Open only to doctoral students in counseling psychology. Permission required and enrollment limited. Individual work with clients under supervision on a range of issues and problems. Personal, social, relationship, educational, and vocational adjustment and developmental focus.

## CCPJ 6350. Externship in counseling

 psychology (0-3)Faculty. Year-long placement in a field-setting for clinical experience. (Required for doctoral students). Students petition to be placed into a supervised two-day-a-week training site and see individual and group counselors. To apply, students must complete practicum sequence, pass certification/comprehensive examinations, and have completed most coursework. For students to be eligible for externship they need to have completed at least two years of coursework and three years of practicum. Externships involve students applying to affiliated programs (i.e., institutions and organizations with which we have established affiliation agreements). We require students to be on site for at least two days a week for eight to ten months, that the students be supervised by a licensed psychologist, and that the students be trained in individual and group modes of service delivery.
*CCPJ 6360. Practice in psychological counseling (4 points each for fall and spring) Faculty. Required: permission of the instructor. For advanced doctoral candidates in counseling psychology. Course involves a weekly seminar, client assignments with individual supervision, and exposure to a range of theoretical approaches to the clinical/counseling interview. Students register for 4 points each term.

CCPJ 6362. Group practicum (3)
Faculty. Permission required. Students must submit written application by the midterm date of the preceding semester. Limited to advanced students with appropriate backgrounds in group work. Students will practice group counseling skills in selective settings.

CCPJ 6363. Advanced group and family systems practicum (2)
Faculty. Permission required. Prerequisites:
CCPJ 5025. (Year Course). Advanced group
supervision to provide service to clients in the Dean Hope Center and/or outside agencies.

CCPJ 6368. Advanced supervision and teaching of counseling ( $0-2$ )
Faculty. Permission required. Supervision and related teaching activities for advanced doctoral students under the guidance of a faculty member. Registration not limited to one term.

## Seminars

CCPJ 5560. Review of research in counseling psychology (3)
Faculty. Required of and limited to doctoral candidates in counseling psychology. Exploration of theoretical and methodological approaches in counseling psychology.

CCPJ 5563. Special topics and issues in counseling psychology (1-3) Faculty. New and emerging developments, practices, and concerns in the field are examined and evaluated. Topics are announced in the schedule of classes that is posted online each semester. Registration not limited to one term.

## CCPJ 6560. Advanced professional issues (0-1)

Faculty. Students will familiarize themselves with a range of professional issues that affect their learning and development as counseling psychologists and will have the opportunity to explore topics not currently available in the curriculum. Limited to doctoral students in psychology.

## CCPJ 6569. Professional ethics and

 standards in psychology (3)Faculty. Ethics and standards of psychological practice and research. Limited to doctoral students in psychology. Others by special permission.

## CCPJ 6570-CCPJ 6579. Research

 practicum in counseling psychology Faculty. Permission of instructor required. Students participate in ongoing research under the direction of a faculty member. Participation includes formulation of hypotheses, identification of appropriate variables and measures, data collection and analysis, and preparation of research reports. Students register for two consecutive terms.- CCPJ 6570. Indigenous Research (0-3)
Professor Hill.
- CCPJ 6571. Perspectives in career, cognition and health (2-3)
Professor Gushue.
- CCPJ 6572. Multicultural competencies (1-3)
Professor Sue.
- CCPJ 6573. Cross cultural research (2-3) Professor Smith.
- CCPJ 6574. Multicultural perspectives on social attitudes, identity, and development (2-3)
Professor Miville.
- CCPJ 6575. Research models and procedures with racial/cultural emphases (2-3) Professor Carter.
- CCPJ 6576. Prevention, multicultural training, spirituality, and counseling (0-1) Professor Lau.
- CCPJ 6577. (2-3)

Professor Brewster.

- CCPJ 6578. (2-3)

Faculty.

- CCPJ 6579. (2-3)

Faculty.
CCPJ 7502. Dissertation seminar (1-3) Faculty. Permission required. Prerequisite: CCPJ 5560 and CCPJ 6572-CCPJ 6579. An advanced research course designed to facilitate the development of doctoral dissertations and presentation of plans for approval at all steps in the process. Required of all doctoral students before or after an approved proposal. Registration limited to two terms. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

CCPJ 7572. Advanced research practicum in counseling psychology (0)
Faculty. Permission required. Prerequisite: CCPJ 6572-79. This course is a continuation of CCPJ 6572-79 and is only open to students who have completed two semesters of the prerequisite.

## Independent Study and Research

Students may register for intensive individual study of a topic of special interest. Registration in independent study is by permission of the instructor under whose guidance the work will be undertaken. Credit may range from 1 to 3 points each term except for CCPJ 8900 (Dissertation advisement) and registration is not limited to one term. Hours for individual conferences are to be arranged.

CCPJ 4902. Research and independent study in psychological counseling (1-3)

CCPJ 6902. Advanced research and independent study in counseling psychology (1-3)
CCPJ 8900. Dissertation advisement (0) Faculty. Individual advisement on doctoral dissertation. Fee to equal 3 points at current tuition rate for each term.

## Counseling and Clinical Psychology

## PSYCHOLOGICAL COUNSELING

## Ed.M. Co-Coordinators:

Professor Robert T. Carter
Professor Riddhi Sandil
Program Office: (212) 678-3397
Website: www.tc.edu/ccp/CounPsych

## Degrees Offered:

PSYCHOLOGICAL COUNSELING-
mental health counseling (COUM)
Master of Education (Ed.M.)
PSYCHOLOGICAL COUNSELING-
SCHOOL COUNSELOR (COUS)
Master of Education (Ed.M.)
Master of Arts (M.A.) - en passant

## PSYCHOLOGICAL COUNSELING

 (COUP)Master of Education (Ed.M.)
Master of Arts (M.A.)- en passant

## Program Description:

The Program in Psychological Counseling is dedicated to the preparation of psychological counselors who facilitate the normal and optimal development of individuals, groups, and organizations that is culturally relevant and psychologically appropriate across the lifespan. Our students are taught to use strategies of prevention, intervention, and remediation to assist others in developing effective coping skills and responses to their environments. (See Psychological Counseling program handbook for more information.)

The objectives of the program are to prepare students to:

1) Be self-aware, reflective, and sensitive to social constructions and issues related to identity group membership and to participate in a variety of settings with diverse populations; 2) Intervene in appropriate arenas through their commitment to education, evaluation, research, and program development; 3) Focus on the development of individuals and groups, their educations and careers, assets and strengths, the importance of person-environment interactions, psycho-education and preventive needs, as well as their pathologies; 4) Integrate theory, practice, and research; and 5) Develop identities as ethical counselors who are socialized into the profession and contribute to the discipline and to society. Students are expected to adhere to ethical and professional standards of practice and conduct. Academic dishonesty and unethical behavior may be grounds for immediate dismissal from the program (master's or doctoral). These competencies prepare students to work in a variety of settings with emphasis on educational (e.g.,
schools, colleges, and universities, etc.), health (e.g., outpatient clinics, hospitals, nursing homes, etc.) and related agencies. In roles as psychological counselors, master's graduates will be able to apply their skills in school counseling, clinical practice, administration, assessment, and research.

With the help of a faculty advisor, students register for required and elective courses relevant to their special needs and career objectives. Depending on their areas of interest and levels of training, graduates have found employment in colleges, adult education centers, industry, various health centers, and community and government agencies.

Students in the program are expected, by the end of their training, to have the following in common (regardless of their eventual work settings):

- They are concerned with assessing, facilitating and guiding individual development. Their focus is on enhancing those conditions which further human development and on ameliorating those that hamper it. They help individuals discover and take advantage of possibilities in the environment and in themselves. They are skilled in working with individuals from diverse ethnic, racial, cultural, and socioeconomic backgrounds.
- They are concerned with the social, situational, and psychological determinants of behavior. They use their theoretical knowledge to bring about growth in individuals and their environments. They are concerned with providing individuals and groups with experiences that will help them achieve their full potential.
- They are skilled in several modes of facilitating human development, such as shortterm individual and group counseling, environmental intervention, and planned exploratory and developmental experiences. They are concerned with translating concepts and theories into strategies and programs of intervention. They not only engage in designing innovative programs and planned interventions, they also evaluate the out comes of such undertakings.


## Special Application

## Requirements/Information:

An undergraduate major in psychology or one of the other social or behavioral sciences is desirable but not essential. It is expected that the personal statement which accompanies the student's application will show a realistic assessment of the student's professional interests and goals, as well as how she/he fits with the master's program's training objectives. Applicants for the master's program are con-
sidered for fall and spring admission. For masters applicants, all admissions materials must be received by the application deadlines as advertised by the College. See the Admissions section of this bulletin for more information. Please contact the Admissions Office for further information about admission to the Ed.M. program.

## Degree Requirements:

The Ed.M. is granted after successful completion of a special project and 60 points of planned, sequential study beyond the bachelor's degree, of which at least 48 points must be taken at Teachers College. Approval of transfer credits to the Ed.M. program must be conducted upon admission into the program; transfer credits will not be accepted thereafter. The Ed.M. degree could lead to the doctorate at Teachers College and elsewhere, but usually with some loss of time and credits because of differences in emphases between master's and doctoral programs. Students who apply to the program during or after taking classes at Teachers College as a non-matriculated student can transfer up to 9 points (with a maximum of 8 points in the major) if accepted as a matriculated degree student. Additional information may be found in the Master's Student Handbook.

School counseling is one of several areas of specialization within the Ed.M. program in Psychological Counseling (COUS). It is a specialty that allows students to develop appropriate skills to deliver services that are specific to school settings, in addition to learning the essential functions generally found in the counseling profession.

A graduate of this specialization is eligible for provisional certification as a School Counselor in New York State after completing the program, including a series of specified courses. Consult the Master's Student Handbook for more information about the School Counselor Specialization.

For permanent certification, New York State requires two years of employment as a school counselor and 30 additional credits of graduate work. The credits from the Ed.M. beyond the M.A. will be applied toward the 30 . Students planning to obtain New York State Certification in School Counseling use the en passant M.A. to apply for provisional certification. Students should complete the application for certification upon graduation from the M.A. program.

In 2005, Teachers College received approval from New York State to offer a LicenseQualifying Mental Health Counseling Program (COUM). Along with completion of required coursework, students can become
eligible for licensure when they complete 3000 hours of post-master's supervised experience in the practice of mental health counseling and pass a national examination. For information regarding licensure, please contact the Office of the Professions, New York State Education Department (http://www.op.nysed.gov/mhp.ht).

All students in the Psychological Counseling Ed.M. program (COUM, COUS, and COUP) must take specific required courses in the following content areas:

- Human growth and development: HUDK

4022, Developmental psychology: Childhood (3); HUDK 4023, Developmental psychology: Adolescence (3); HUDK 4024, Developmental psychology: Adulthood and the lifespan (3); or HUDK 5029, Personality development and socialization across the lifespan (3)

- Social cultural foundations of counseling: CCPJ 4873, The winter roundtable on cultural psychology and education (1) and two of the following: CCPJ 5165, Racial-cultural counseling laboratory (4); CCPJ 5020, Racism and racial identity in psychology and education (3) or CCPJ 5164, Multicultural counseling and psychology (3)
- Counseling theory and practice: CCPJ 4064, Theories of counseling (3), and CCPJ 5371, Foundations of counseling (3)
- Psychopathology: CCPJ 4000, Multicultural psychopathology (3); CCPX 5032, Adult psychopathology (3); or CCPX 5034, Child psychopathology (3)
- Group counseling: CCPJ 5025, Group counseling (3)
- Lifestyle and career development: CCPJ 5062, Career counseling and development (3)
- Assessment and appraisal: CCPJ 5060, Assessment in counseling psychology (3), and one of the following: HUDM 5059 Psychological measurement (3); HUDM 4050, Introduction to measurement (3); or CCPJ 4066, Foundations of testing and accountability (3)
- Research and program evaluation: ORLJ 4009, Understanding behavioral research (3), and ORL 5522, Evaluation methods I (3)
- Professional orientation and ethics: CCPJ 4560, Professional and ethical issues in psychological counseling (3)
- Foundations of mental health counseling and consultation: CCPJ 5371, Foundations of counseling (3) (also listed under Counseling Theory and Practice), and CCPJ 4165, Consultation in community agencies and resources (3)
- Clinical instruction: CCPJ 5360, Practicum in career and personal counseling (4), and CCPX 5630, Case conference (0)
- Recognition and reporting of child abuse and maltreatment.
- One year of supervised fieldwork: CCPJ 5260, Fieldwork in psychological counseling and rehabilitation ( 6 points total spread over two or three semesters); CCPJ 5263, Supervised fieldwork in elementary school counseling ( 6 points total spread over two or three semesters); or CCPJ 5265,
Supervised fieldwork in secondary school counseling ( 6 points total spread over two or three semesters).

School counselors (COUS) also are required to take the following:
Elementary

- HUDK 4022, Developmental psychology: Childhood
- CCPJ 5263, Supervised fieldwork in elementary school counseling
- CCPJ 4160, School counseling for children or adolescents, or
- ITSF 5123, School counseling of bilingual/ bicultural children, adolescents, and their families
- Child abuse and maltreatment identification, reporting and intervention
- Violence prevention and intervention**


## High School

- HUDK 4023, Developmental psychology: Adolescence
- CCPJ 5265, Supervised fieldwork in secondary school counseling
- CCPJ 4160, School counseling for children and adolescents, or
- ITSF 5123, School counseling of bilingual/ bicultural children, adolescents, and their families
- Child abuse and maltreatment identification, reporting and intervention
- Violence prevention and intervention** (Course HBSS 4123 for 3 credits). For course information, contact the department (ext. 3964) for specific dates and times.

Required courses often are scheduled in the afternoon and evening, so it is possible for students with flexible schedules to attend on a part-time basis and complete the program; however, it should be noted that at times, required courses may be offered during the day and students must be prepared to make needed accommodations. Full-time students generally complete the program in about two years. The length of program completion for parttime students varies with the number of points in which they enroll each semester.

In addition to required core courses, students will be expected to select electives from the various areas of psychology and other appropriate disciplines that will provide breadth and depth to their preparation as counselors.

Consult the Master's Student Handbook for further information about Ed.M. program requirements.

A special project is required in addition to the 60 points of coursework. Students should plan to complete their project in the same semester that they apply for the Ed.M. degree.

The Comprehensive Exam, which is a mandatory requirement for obtaining the en passant M.A., is generally taken in the semester in which 45 credits are completed.

## COURSES:

Please refer to course descriptions listed under Counseling Psychology.

## PSYCHOLOGY <br> IN EDUCATION

Program Coordinator:
Dr. Aurélie Athan
Program Office: (212) 678-7461
Email: ama81@columbia.edu
Website: www.tc.edu/ccp/psyched/proginfo.asp

## Degrees Offered: Two Tracks

GENERAL PSYCHOLOGY (PSYG)
Master of Arts (M.A.)
PERSONALITY AND PSYCHOPATHOLOGY (PSYA)
Master of Arts (M.A.)

## Program Description:

The Master of Arts degree in Psychology in Education is designed to provide students with a foundational knowledge of psychopathology, treatment theories, and research methods. The program is appropriate both for students who have obtained undergraduate degrees in Psychology and for those with a more limited background in the field. Students will have the opportunity to develop the critical thinking skills needed to interpret scientific knowledge, to review traditional and contemporary treatment models, to engage in innovative research, and to seek out fieldwork opportunities throughout New York City.

Students can choose one of two available majors, both within the Psychology in Education program: Personality and Psychopathology (MA-PSYA) or General (MA-PSYG). The PSYA major is a structured curriculum that consists of pre-selected blocks of coursework to ensure a strong background in the fundamentals of applied psychology. The PSYG major consists of the same course offerings but allows students to independently tailor their own curriculum. Both majors prepare graduates to become familiar with the multiple avenues available to them in applied psychology and will be prepared to confidently pursue higher education or employment in mental health settings.

During their tenure, students are closely guided by the Masters Program advisors. Advisors help to clarify students' academic goals, to gauge progress, and to assist with their professional development.

Graduates of this academic M.A. program are not trained for the independent practice of psychotherapy or psychological assessment. However, with a Master of Arts degree, graduates may find employment in research centers,
social service agencies, non-profits, community colleges, and hospitals. Completion of the M.A. degree does not guarantee admission to a doctoral program, here or elsewhere, but outstanding students are likely to be more attractive candidates.

## Special Application Requirements/Information:

At least one of the two required letters should be an academic reference. The GREs are recommended but not required.

Applications are considered for Fall admission only. All admissions materials must be received by the early or final deadlines as advertised by the College. For information on application deadlines, see the Admissions section of this bulletin.

## Degree Requirements:

The programs for the Master of Arts (M.A.) degree in Psychology in Education require 36 points of coursework and a Special Project. The General Track requires 18 points of coursework from any of the classes offered within the Clinical Psychology program (CCPX). The Personality and Psychopathology Track is built around a 24-point core of courses in Clinical Psychology (CCPX). Degree requirements may be completed on a full-time basis in a calendar year (two semesters plus one or two summer sessions at the end), one year and one semester, or the equivalent in part-time study. Many students prefer to remain in the M.A. program for more than one academic year. Students may take up to five years to finish the program.

In addition to the courses taken within the Program in Clinical Psychology, M.A. students in both program tracks must satisfy the College breadth requirement. This consists of completing 3 classes (2-3 credits each) outside of the Counseling and Clinical Psychology Department (CCPX or CCPJ). The remaining points may be taken as electives within the department, within TC, or within the Columbia University campus at large.

Transfer credits from courses taken outside of Teachers College are not accepted toward any M.A. program at Teachers College.

All students matriculating in the M.A. Program are given a copy of the Student Handbook for the specific academic year in which they matriculate. The Handbook outlines these requirements in detail. The basic curriculum includes:

## The Curriculum:

GENERAL PSYCHOLOGY TRACK
(36 points total and Special Project)

## A. Required Clinical Courses (18 points):

- Students take 18 points of any mas-ter's-level (typically 4000- and 5000level) courses in the Clinical Psychology program plus the three course breadth requirement (see section B.).
- Students are required to complete a Special Project.
- Certain classes may be restricted to doctoral students only. Please refer to the course schedule to determine which courses are open to M.A. students.
* The degree is 36 credits in total made of 18 or 24 credits within the CCPX department, plus the breadth requirement of three (2-3 credit) courses outside of CCPX/CPPJ but within TC. Any remaining elective credits can be applied to courses anywhere in the TC or Columbia University \& Health Sciences campus (a.k.a. cross-registration).


## The Curriculum:

## PERSONALITY AND

PSYCHOPATHOLOGY TRACK
(36 points total and Special Project)

## A. Required Clinical Courses (24 points):

| I. Foundations (12 points) |  |
| :--- | :--- |
| - CCPX 4000 | Introduction to applied <br> psychology (3) |
| - CCPX 5032 |  <br> psychopathology (3) |
| - CCPX 5034 | Child psychopathology (3) <br> Research methods in clinical <br> - CCPX 5533 <br> psychology (3) |

## II. Applications \& Populations (6 points)

- CCPX 4037

Introduction to cognitive behavior therapy (3)

- CCPX 4038 Comparative psycho-
- CCPX 4040
- CCPX 5045
- CCPX 4542
- CCPX 5033
- CCPX 4032
- CCPX 4060
therapies (3)

| - CCPX 4125 | Women and mental <br> health (3) |
| :--- | :--- |
| - CCPX 4150 | Introduction to forensic <br> psychology (3) |
| III. Specializations \& Innovations |  |
| (6 Credits) |  |$\quad$| - CCPX 4010 | Social problems for clinical <br> psychologists (3) <br> Psychology of human <br> intimacy (3) |
| :--- | :--- |
| - CCPX 4036 |  |

B. Breadth Requirement for PSYA and PSYG majors ( $6-9$ points; 3 courses)

Regardless of track, three out-of-department courses, (not CCPX and CCPJ) 2-3 points each (totaling in 6-9 credits) are required. This is a TC-wide policy and cannot be waived. One-credit courses do not count toward fulfillment of this requirement. Students in the General major (PSYG) can choose ANY three (or more) out-of-department courses. Students in the Personality and Psychopathology major (PSYA) should be guided by the list below in making their choices. The suggested course listing outside of the Department of Counseling and Clinical Psychology is not comprehensive. Please see TC catalog for full list.

## 1. Research Methods

- HUD 4120 Methods of empirical research (3)
- ORLJ 4009 Understanding behavioral research (3)

2. Statistics

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)

3. Suggested courses

- HBSK 4073 Childhood disorders (3)
- HBSK 4085 Behavioral management in the classroom (3)
- HBSK 5031 Family as a context for child development (3)
- HBSS 4110 Health promotion for children and adolescents (3)
- HBSS 4112 Social policy and prevention (3)
- HBSS 4113 Human sexuality education (3)
- HBSS 4117 HIV/AIDS epidemiology and education (3)
- HBSS 4121 Death education (3)
- HBSS 4122 Women's health (3)
- HUDK 4015 Psychology of thinking (3)
- HUDK 4021 Developmental psychology: Developmental psychology:
Infancy (3)
- HUDK 4022 Developmental psychology: Childhood (3)
- HUDK 4023 Developmental psychology:

Adolescence (3)

- HUDK 4024 Developmental psychology: Adulthood/Lifespan (3)
- HUDK 4029 Human cognition and learning (3)
- HUDK 4080 Educational psychology (3)
*PSYA students may choose their third breadth course from the suggested course list or from anywhere in the TC catalog. PSYG students can independently select all three breadth courses. The Program Coordinator or the M.A. Program Assistants are available for consultation about course selection and about the Special Project.


## CCPX COURSES:

Please refer to course descriptions listed under Clinical Psychology.
*Please note: Clinical required and elective 'topics' courses (CCPX 4199) change each year. Information about these courses can be found in the M.A. Handbook, but not in the Teachers College Catalog.

# Curriculum and Teaching 

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## DEPARTMENTAL MISSION:

## The Department of Curriculum and Teaching, established in 1938,

 was the first department in the U.S. devoted to the scholarly study of problems of curriculum and teaching across all subjects and all levels of schooling, from early childhood through the education of teachers and supervisors. Broad questions about the nature, purpose, and design of curriculum and about the theory and practice of teaching remain at the core of all department programs. Addressing these questions in contemporary times calls for critical analyses of the ways in which curriculum, teaching, and schooling contribute to social inequalities, and a commitment to educating for social justice. Our location in New York City compels us to focus intensely on the lives of children and youth who attend under-resourced schools and face complex challenges in urban centers, but this focus does not exclude attention to problems of teaching and curriculum in suburban and rural settings as well as international contexts. Across all our programs, the preparation of teachers, educational leaders, teacher educators, and educational researchers is designed to provide them with the intellectual tools needed to re-imagine schools and other educational settings. We aim to prepare the next generation of outstanding educators who have broad repertoires of knowledge, practices and dispositions that enable all children, including those who have acquired labels, to gain access to and succeed with the kind of education that historically has been reserved for children of privilege. Teacher inquiry, critical perspectives, knowledge of content and pedagogy, a curricular stance, and the interrelationship of theory and practice are also woven throughout our certification and our advanced programs.Typical positions for which students are prepared include:

- Teacher or supervisor of:
-infancy or early childhood education
—early childhood special education
-elementary education
-secondary education
-students with disabilities
-gifted education
-literacy
- Director of:
-child-care center
-community or government-based organization or agency
-infant and parent center
-early childhood program
-literacy
- College teacher in undergraduate or graduate programs specializing in:
-infancy or early childhood education
—early childhood special education
-early childhood policy
—elementary or secondary education
-teaching students with disabilities
-gifted education
-curriculum development
-curriculum studies
-literacy education
-educational leadership and school change
-teacher education
-urban and multicultural education
- Administrator
(such as assistant superintendent, consultant, coordinator, director) in charge of:
-curriculum and instruction
-curriculum research
-professional development
-gifted education
-language arts
- Teacher-leader in programs for learners from infancy to adulthood
- Consultant or educational specialist in a school or non-school agency


## FACULTY:

## PROFESSORS:

James H. Borland
(Gifted Education)
Lucy McCormick Calkins
(Curriculum and Teaching,
Literacy Education)
Celia Genishi (Early Childhood
Education)
A. Lin Goodwin (Teacher Education)

Sharon Lynn Kagan
(Early Childhood Education)
Nancy Lesko (Curriculum and Teaching)
Marjorie Siegel
(Curriculum and Teaching,
Literacy Education)
Karen Zumwalt (Curriculum and Teaching) (on sabbatical Fall 2011)

## ADJUNCT PROFESSOR:

Beatrice Fennimore
(Early Childhood Education)

## ASSOCIATE PROFESSORS:

Thomas Hatch (Curriculum and Teaching)
Michelle Knight-Diop
(Curriculum and Teaching)
Celia Oyler (Inclusive Education,
Teacher Education)
Molly Quinn (Inclusive Education,
Curriculum and Teaching)
Susan L. Recchia
(Early Childhood Special Education)
Mariana Souto-Manning
(Early Childhood Education)

## ADJUNCT ASSOCIATE PROFESSORS:

Janet Andron Hoffman
(Early Childhood Education)
Lisa Wright (Gifted Education)

## ASSISTANT PROFESSORS:

Alicia Broderick (Inclusive Education, Disability Studies in Education)
Daniel Friedrich
(Curriculum and Teaching)
Maria Paula Ghiso (Literacy Education)
Srikala Naraian (Inclusive Education,
Disability Studies in Education)
Michael Wilson (Inclusive Education)

## ADJUNCT ASSISTANT PROFESSORS:

Gayle Allen (Curriculum and Teaching)
Marcella Bullmaster-Day
(Curriculum and Teaching)
Allison Coviello (Curriculum and Teaching)
Raymond Cummings
(Curriculum and Teaching)
Min Hong (Early Childhood Education)
Monica White (Curriculum and Teaching)

## LECTURERS:

Lisa Beck (Early Childhood Education)
Britt Hamre (Inclusive Education,
Teacher Education)
Cathy Rikhye
(Early Childhood Special Education)
Nancy Sall (Early Childhood
Special Education)
Sam Shreyar (Early Childhood Education)
Jacqueline Simmons
(Curriculum and Teaching)

## INSTRUCTORS:

Lisa Cederbaum
(Early Childhood Education)
Mary Coakley (Literacy Specialist)
Ellie Cook
(Elementary Inclusive Education)
Molly Cutler
(Elementary Inclusive Education)
Allison Devoe
(Elementary Inclusive Education)
Ellen Ellis (Literacy Specialist)
Chantal Francois (Literacy Specialist)
Priya Gupta
(Elementary Inclusive Education)
Hannah Kye
(Elementary Inclusive Education)
Megan Lawless
(Elementary Inclusive Education)
Sujung Um
(Elementary Inclusive Education)
For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit us at www.tc.edu/faculty.

## GENERAL INFORMATION FOR PROGRAMS IN THE DEPARTMENT OF CURRICULUM AND TEACHING

Initial certification and professional certification programs are designed to meet New York State certification and New York City licensure requirements.

## DEPARTMENTAL PROGRAM DESCRIPTIONS

## Master of Arts

There are two different types of Master of Arts programs within the Department of Curriculum and Teaching: Initial Certification programs and Professional Certification programs.

With one exception, initial certification M.A. programs are designed for people with little or no teaching experience or preparation who wish to become teachers. Programs in this department leading to initial certification are: Early Childhood Education, Early Childhood Special Education, Early Childhood Education and Special Education: Dual Certification-Initial, Elementary Inclusive Education, Elementary Inclusive Education with an extension in Gifted Education, and Dual Certification in Elementary Inclusive Education and Teaching Students with Disabilities.

The Literacy Specialist Program is also an initial certification program, but is designed for people who already hold initial certification as a teacher in New York State. The Literacy Specialist Program thus enables people who are already certified teachers to add a new certification area to their professional credentials. Upon completion of the program and two years successful teaching experience, students may receive professional certification in their first certification area, if they meet all other state requirements.

Professional Certification M.A. programs are designed for individuals who are already certified to teach in New York, or another state, and who seek a Master of Arts degree in the area of their initial certification: Elementary or Secondary Education, Gifted Education, or Teacher of Students with Disabilities. Graduates of these programs meet the formal educational requirements for professional certification in the State of New York, provided they meet the state's requirements (initial certification in the area, successful performance on state tests, and two years teaching experience).

## CURRICULUM AND TEACHING

## Master of Education

The Ed.M. is an advanced master's degree (between an M.A. and an Ed.D.) that offers a flexible program of study focusing on leadership in curriculum and teaching in a range of educational settings. This degree program offers students the opportunity to develop specialized understandings and a capacity for leadership in curriculum and pedagogy. Leadership is interpreted broadly in this program to include developing curricula, studying teaching, designing professional development, and engaging in action research, all with a focus on challenging inequalities and imagining new possibilities for education.

The Ed.M. is a 60 -point program, with the possibility of transferring in 30 points from relevant graduate study. It does not lead to New York State certification as teacher or as building administrator.

Two years of teaching experience or the equivalent is a prerequisite for admission. An initial master's degree is usually required.

## Doctor of Education

The Department of Curriculum and Teaching offers a single Doctor of Education program with different areas of concentration. The program requires 90 points of graduate study beyond the baccalaureate, 40 points of which may be transferred from previous graduate work at other institutions, should they meet requirements of the Teachers College degree.

Applicants interested in the Ed.D. program in the Department of Curriculum and Teaching should consult the booklet, "Studying for the Ed.D. Degree in the Department of Curriculum and Teaching," available from the Department of Curriculum and Teaching.

The concentrations within the Ed.D. program are:

- Curriculum Studies
- Early Childhood Education (specialization)
- Early Childhood Policy
- Early Childhood Special Education
(Concentration within Early
Childhood Education)
- Educational Leadership and School Change
- Gifted Education
- Literacy Education
- Urban and Multicultural Education

Doctoral students in all concentrations may also take coursework to prepare themselves as teacher educators.

## Enrollment Requirements for First-Year Ed.D. Students

Every first-year Ed.D. student in the Department of Curriculum and Teaching is required to enroll in C\&T 5000, Theory and Inquiry in Curriculum and Teaching, in both the fall ( 6 points) and the spring ( 3 points) semesters of his or her first year. C\&T 5000 meets for a double class session once per week in the fall, and for a single class session once per week in the spring. A student can enroll for more than this minimum, but C\&T 5000 must be part of his or her first-year course of study.

C\&T 5000 is designed to make beginning doctoral students aware of important problems and issues in curriculum and teaching, to introduce students to methods of formulating questions and to modes of inquiry appropriate to doctoral-level research, and to build a cohesive student cohort.

This is a rigorous course, with respect to both the quantity and sophistication of the material for which students are held responsible. The course requires a commitment of time and effort commensurate with the norms of scholarship at the doctoral level.

It is our belief that the demands placed on the students by this course will benefit students and that those who complete the course and pass the certification examination will be well prepared to continue their doctoral studies successfully through the dissertation phase. Students accepted into the Ed.D. program will receive a list of course texts with their acceptance letters so they can begin their reading early.

## Departmental Special Application Requirements/Information:

For professional certification M.A. admission, please submit a resume and: (a) proof of early childhood, elementary or secondary school teacher initial NYS certification (formerly provisional) or certification from another state, or (b) proof that you have completed an accredited Elementary, Early Childhood or Secondary teacher preparation/student teaching program. An undergraduate GPA of 3.0 is a minimum requirement. Teaching experience is desirable, but not required. (For admission requirements for the Initial certification M.A. programs, please refer to the appropriate section below.)

Please note that applicants are not required to take the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) to apply to any of the M.A. programs in the Department of Curriculum and Teaching. All Ed.M. students must also provide evidence of a minimum of two years of successful teaching experience. Please note that neither the Graduate Record Examination (GRE) nor the Miller Analogies Test (MAT) is required for application to the Ed.M. program in the Department of Curriculum and Teaching.

Admission to programs leading to the Ed.D. degree is determined on the basis of academic ability as evidenced by success in prior academic work and/or other measures of academic aptitude; demonstrable potential for research, field inquiry, or development activities in education; and three years of successful teaching or equivalent experience. All applicants are required to submit Graduate Record Examination (GRE) or Miller Analogies Test (MAT) scores that are no more than five years old, and are required to submit a writing sample. The Department of Curriculum and Teaching evaluates Ed.D. applications twice per year.

All admissions materials must be received by the early or final deadlines as advertised by the College. For information on application deadlines, see the Admissions section of this bulletin.


MASTER'S AND CERTIFICATION PROGRAMS IN CURRICULUM AND TEACHING

| Certification Level | Code | Degree | Certification Area | Prerequisites | Teaching Experience |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CUIS-InIT | M.A. <br> (38 credits) | Grades 5-9 Special Ed Generalist or Grades 7-12 Special Ed English, Biology, Chemistry, Earth Science, Physics, Math, Social Studies | - 3.0 Undergrad GPA <br> - Admission to Teaching Residents at Teachers College (TR@TC) program*** | Teaching experience not required, <br> Prior experience with children/learners a plus |
|  | ECED-INIT ECSE-InIT ECSE-dual | M.A. ECE or ECSE (40 credits); <br> M.A. Dual ECE/ECSE (48 credits) | Early Childhood Ed Early Childhood Special Ed Dual ECE/ECSE | - 3.0 Undergrad GPA <br> - All or most NYS required liberal arts courses completed. Commitment to urban, public schools and diverse learners | Previous experience with young children preferred but not required |
|  | ELEM-Init | M.A. (40 credits) | Elementary 1-6 | - 3.0 Undergrad GPA | Teaching experience not required, <br> Prior experience with children/learners a plus |
|  | ELEM-dual | M.A. (52 credits) | Elementary 1-6 \& Teaching Students with Disabilities 1-6 | - 3.0 Undergrad GPA | Teaching experience not required, <br> Prior experience with children/learners a plus |
|  | ELGF-DUAL | M.A. Inclusive Elementary with Gifted Education (52 credits) | Elementary 1-6 plus gifted extension | - 3.0 Undergrad GPA Commitment to urban, public schools and diverse learners | Teaching experience not required, Prior experience with children/learners a plus |
|  | GIFT-Ext | M.A. extension program (in-service) (32 credits) | Gifted Extension | Initial Certification** | Preferred but not required |
|  | LITI-INIT | M.A. (Literacy Specialist) (32 credits) | Literacy Specialist (birth-grade 6) | - 3.0 Undergrad GPA <br> - Initial Certification** (any teaching credential) | Strong preference for those with teaching experience, but not required |
|  | CUED | M.A. <br> (32 credits) | Elementary | - 3.0 Undergrad GPA <br> - Initial Certification** Elementary Early Childhood or Middle School (may require additional credits) | Preferred but not required |
|  | CUSD | M.A. <br> (32 credits) | Secondary <br> English, Math, Science, Social Studies | - 3.0 Undergrad GPA <br> - Initial Certification** in one of the listed areas English, Math, Science, Social Studies | Preferred but not required |

* After testing and two years of teaching, one is eligible for Professional Certification.
** Initial NYS certification or the equivalent certification from another state or graduation from an NCATE approved teacher education program.
*** For more information, please go to the website: www.tc.edu/teachingresidents.
At this point, we are unable to accommodate those holding NYS transitional B certificates (i.e., first year teachers without regular certification) nor those holding ABCTE certification or any variant of an emergency certification.

We hope to develop a program for uncertified experienced teachers, but are unable to offer it at this point. However, uncertified elementary or secondary teachers who have a minimum of 3 years teaching experience and are interested in the CUED or CUSD MA programs should consult the respective program coordinators.

## CURRICULUM AND TEACHING

## CURRICULUM <br> AND TEACHING

M.A. Program Coordinator (Elementary): Professor Karen Zumwalt

Ed.M. Program Coordinator (Secondary): Professor Nancy Lesko

Program Office: (212) 678-3770
Ed.M. Advisors: Professors Thomas Hatch, Michelle Knight, and Nancy Lesko

Email: zumwalt@tc.edu
Email: knight-diop@tc.edu
Email: lesko@tc.edu
Website: www.tc.edu/c\&t/Curric\&Teach
Ed.D. Program Coordinator:
Professor Thomas Hatch
Program Office: (212) 678-3765
Email: ctedd@tc.edu

## Degrees Offered:

CURRICULUM AND TEACHING (CURR)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
ELEMENTARY EDUCATION-
PROFESSIONAL CERTIFICATION (CUED-PROF)
Master of Arts (M.A.)
SECONDARY EDUCATIONPROFESSIONAL CERTIFICATION (CUSD-PROF)
Master of Arts (M.A.)

## Program Description:

The Program in Curriculum and Teaching is designed for teachers, administrators, and other educators who: (1) have received formal professional preparation in preschool through grade twelve teaching at an accredited college or university, and/or; (2) hold, or are eligible to receive, teacher certification.

Students will have opportunities to become expert in such areas as curriculum development, school change and reform initiatives, action research and other school-based inquiry strategies, and will gain perspectives on teaching as complex intellectual activity. The overarching intention of the program is to assist educators who expect to exert leadership in their school settings and with their colleagues.

Any applicant seeking initial teacher certification should apply for the preservice, or initial certification, M.A. program in Early Childhood Education or Elementary/Inclusive Elementary Education.

## Special Application <br> Requirements/Information:

Refer to Departmental Special Application Requirements/Information section at the beginning of this department section. Uncertified elementary or secondary teachers with a minimum of 3 years of teaching experience should consult with the CUED or CUSD program coordinator, if interested in these MA programs.

## Degree Requirements:

All the Master of Arts programs include field experience or practica.

## Master Degrees in Curriculum and Teaching

## Elementary Professional <br> Certification Program

The program supports three shared philosophical stances (inquiry, curriculum, and social justice) underlying the long standing tradition of preparing educational leaders. With careful planning and advising, this 32 -point program can be completed in 12 months starting in the fall term.
Core Courses ( 7 points):

- C\&T 4002 Curriculum theory and history (3)
- C\&T 4005 Principles of teaching and learning (4) (includes practicum in a classroom setting)

Content/Pedagogy Courses (12 points):
Students are required to take one course
in each of the following areas:

1. Mathematics
2. Science or Technology
3. Literacy
4. Social Studies (C\&T 4052, Designing curriculum and instruction (3)— Social Studies Section)

Social Context Required Courses (4 pointsOnly offered in the fall semester and must be taken concurrently):

- C\&T4130 Critical perspectives in elementary education (3)
- C\&T 4502 Master's project (1)

Social Context Selective Courses-Diversity (2-3 points)
Students choose one Selective from the following:

- C\&T 4000 Disability in contexts (3)
- C\&T 4001 Differentiating instruction in
- inclusive classrooms (2-3)
-C\&T 4010 Immigration and
- C\&T $4078 \quad \begin{aligned} & \text { Curriculum (2-3) } \\ & \text { Curriculum and teaching }\end{aligned}$ in urban areas (2-3)
-C\&T 4114
- C\&T 5037

Multicultural approaches to teaching young children (2-3) Literacy, culture, and the teaching of reading (3)

NOTE: New York State now requires that CUED students, first enrolled at TC after February 1, 2011, must have a 3 -credit standalone special education course which develops "the skills necessary to provide instruction that will promote the participation and progress of students with disabilities in the general education curriculum." If you have had such a stand alone 3 -credit course in your undergraduate or other graduate studies, you have met this requirement. If you don't, you should take C\&T 4001 for 3 credits. You can use this course to meet your diversity selective requirement or take it as one of your electives.

Social Context Selective Courses-General (2-3 points)
Students choose one Selective from the following:

- C\&T 4004 School change (3)
- C\&T 4023 Differentiated curriculum
- C\&T 4032

Gender, difference,

- C\&T 4161 The teacher: Socio-historical, cultural contexts of teaching (2-3)
- C\&T 4615 Young children and social policy: Issues and problems (2-3)
- C\&T 4121 Early childhood teaching strategies within a social context (2-3)

Elective Courses (3-5 points)
Students have to take at least one elective course (minimum 2 points) outside the Department of Curriculum and Teaching.

## Secondary Professional Certification Program

The program supports three shared philosophical stances underlying the long-standing tradition of preparing educational leaders. The overarching intention of the program is to assist educators who expect to exert leadership in their school settings and with their colleagues. With careful planning and advising, this 32 -point program can be completed in 12 months starting in the fall term.

Prerequisite: Initial Certification in Secondary Education in one of these areas: Social Studies, Mathematics, Science, Technology, and English.

Core Courses ( 10 points)
Students are required to take the following courses:
-C\&T 4002

## Curriculum theory

 and history (3)- C\&T 4005
-C\&T 4052
Principles of teaching and learning (4) (includes practicum in a classroom setting) Designing curriculum and instruction (2-3)

Secondary Content/Pedagogy Courses (12 points)
Students are required to take 12 points of coursework in content/pedagogy in the department and program appropropriate to their area of initial certification. Students will follow the content/pedagogy courses set by the particular program in one of the following areas:

> 1. Social Studies
> 2. Mathematics
> 3. Science and Technology
> 4. English

Social Context Required Courses (4 pointsOnly offered in the fall semester and must be taken concurrently):

| - C\&T 4145 | Critical perspectives in <br> secondary education (3) |
| :--- | :--- |
| - C\&T 4502 | Master's project (1) |

Social Context Selective Courses-Diversity (2-3 points)
Students choose one Selective course from the following:

- C\&T 4000 Disability in contexts (3)
- C\&T 4001 Differentiated instruction in
inclusive classrooms (3)
- C\&T 4010 Immigration and
- C\&T 4078 Curriculum and teaching
- C\&T 5037 Literacy, culture, and the teaching of reading (3)

Special Education Course Requirement (3 points required depending on previous experience)

New York State now requires that CUSD students, first enrolled at TC after February 1, 2011, must have a 3 -credit stand-alone special education course which develops "the skills necessary to provide instruction that will promote the participation and progress of students with disabilities in the general education curriculum." If you have had such a stand-alone 3 -credit course in your undergraduate or other graduate studies, you have met this requirement. If you don't, you should take C\&T 4001 for 3 credits. Also, if you need to take C\&T 4001, you will have to take the C\&T 4052: Designing Curriculum and Instruction for 2 points.

Social Context Selective Courses-General (2-3 points)
Students choose one Selective course from the following:

- C\&T 4004 School change (3)
- C\&T 4023 Differentiated curriculum
-CET 4032
and curriculum (3)
- C\&T 4161 The teacher: Socio-historical cultural contexts of teaching (2-3)

Elective Courses ( $0-3$ points)
Students have already met the College requirement of three courses outside their department, so electives may be taken inside or outside the Department of Curriculum and Teaching.

## Master of Education

The program of study for Ed.M. students is as follows:

- A minimum of 15 points (including the core courses) must be taken in the Department of Curriculum and Teaching. Students must also complete the College's breadth requirement, which consists of three Teachers College courses (a minimum of 2 points each) taken outside Curriculum and Teaching. The program does not require an internship, but one can be arranged as part of the student's program plan.

Core Courses ( 9 points)

- C\&T 4002 Curriculum theory and history (3)
- C\&T 4005 Principles of teaching and learning (3 point option, no practicum)
- C\&T 4052 Designing curriculum and instruction (3)
- Curriculum and Teaching Courses (minimum of 6 additional points)

Social Context Courses (at least 6 credits selected from the following)

- C\&T 4000 Disability in contexts
- C\&T 4001 Differentiating instruction in inclusive classrooms
- C\&T 4010 Immigration and curriculum
- C\&T 4078 Curriculum and teaching in urban areas
- C\&T4114 Multicultural approaches to teaching young children
- C\&T 4145 Critical perspectives in secondary education
- C\&T 5037 Literacy, culture, and the teaching of reading
- C\&T 4004 School change
- C\&T 4023 Differentiated curriculum for gifted students
- C\&T 4032 Gender, difference, and curriculum
- C\&T 4121 Early childhood teaching strategies within a social context
- C\&T 4161 The teacher: Socio-historical, cultural contexts of teaching
- C\&T 4615 Young children and social policy: Issues and problems
-C\&T 5074 Curriculum and teaching policy
- Course on culturally relevant pedagogy
- Out-of-Department Courses three Teachers College courses (minimum of $2-3$ points each)

Integrative Project (1 point)
C\&T 5500 (1): An initiating seminar taken in the fall semester of the student's first year of the program. The purpose of this seminar is to initiate a project that will integrate each student's learning experiences and expand her/his knowledge and practice of leadership. The project may take a number of forms, including an article for publication, a curriculum framework, curriculum development, and action research. The seminar instructor will be responsible for guiding students' completion of their integrative projects. The final project will be evaluated by two readers: the seminar instructor and one other faculty member in the Department of Curriculum and Teaching. Students will have up to four semesters following the seminar (not including summer) to complete the integrative project.

## Doctor of Education

The basic curriculum for Ed.D. students includes:
Core Courses:

- C\&T 5000 Theory and inquiry in curriculum and teaching ( 6 points fall and 3 points spring, of the first year)
Research Core:
- HUDM 4122 Probability and statistical inference (3)

Two (2) research methodology courses relevant to the student's research interests. Students must complete at least two of the required research core courses prior to enrolling in Dissertation Seminar. The third course may be taken concurrently with Dissertation Seminar.

At least one semester of a research seminar taught by a member of the department faculty is also required.

Research Requirements:

- C\&T 7500 Dissertation seminar in curriculum and teaching (3)

Other courses are selected in consultation with an advisor.
Concentrations include:

- Curriculum Studies
- Early Childhood Education (specialization)
- Early Childhood Policy
- Early Childhood Special Education:
(Concentration within Early
Childhood Education)
- Educational Leadership and School Change
- Gifted Education
- Literacy Education
- Urban and Multicultural Education


## EARLY CHILDHOOD EDUCATION

Program Coordinators:
Professor Celia Genishi and
Professor Susan Recchia
$\begin{array}{ll}\text { Program Office: } & \text { (212) } 678-3860 \\ \text { Email: } & \text { genishi@tc.edu }\end{array}$
Email: recchia@tc.edu
Website: www.tc.edu/c\&t/ChildSpecEd

## Degrees Offered:

EARLY CHILDHOOD EDUCATION.
InITIAL CERTIFICATION (ECED-INIT)
Master of Arts (M.A.)
EARLY CHILDHOOD EDUCATION/SPECIAL
EDUCATION-InITIAL CERTIFICATION (ECSE-INIT)
Master of Arts (M.A.)
EARLY CHILDHOOD EDUCATION- SPECIAL EDUCATION/DUAL CERTIFICATION- INITIAL (ECSE-DUAL)
Master of Arts (M.A.)
EARLY CHILDHOOD EDUCATION (ECED)
Master of Education (Ed.M.)*
Doctor of Education (Ed.D.)
*Early Childhood Policy only

## Program Description:

## Master of Arts

There are three initial certification programs in Early Childhood Education:

The course of study for the M.A. in Early Childhood Education (ECED-INIT) leads to initial certification in Early Childhood Education (birth-8 years). The course of study for the M.A. in Early Childhood Special Education (ECSE-INIT) leads to initial certification as a Teacher of Students with Disabilities, Early Childhood (birth-8 years).

Students with backgrounds in elementary education or with no previous coursework in education must complete at least 40 points in order to obtain the Master of Arts degree and the department's recommendation for initial certification.

The course of study in Dual Certification: Early Childhood Education/Early Childhood/Special Education (ECSE-DUAL) leads to initial certification as both an Early Childhood Education teacher and a Teacher of Students with Disabilities in Early Childhood (birth-8 years). Students must complete at least 48 points in order to obtain the Master of Arts degree and the department's recommendation for initial dual certification.

Students in these programs are prepared to teach in diverse and inclusive environments, including homes, schools, and other community settings, which serve children from birth to age 8 and their families. Child-centered and culturally sensitive practices are emphasized throughout the program, focusing on the need for multiple methods of instruction to accommodate a broad range of learners. Through a curriculum that integrates general and special early childhood education content, we aim to enable our initial certification students to become outstanding early childhood teachers, decision makers, and intellectual and ethical leaders. Honoring the importance of understanding children's development and learning in context, the Master of Arts program emphasizes collaboration with families and other professionals and considers policies that affect families' access to desirable services, especially in urban settings. Our students participate in several field experiences, which serve as the foundation from which theories about development, learning, and curriculum come to life and through which teachers begin to construct their professional practice.

## Degree Requirements:

## Master of Arts

Course requirements for M.A. students seeking initial certification as early childhood teachers (birth-8 years):

## Core Courses

- C\&T 4080
-C\&T 4112
- C\&T 4308
- C\&T $4708 \quad$ Student teaching- infancy and early childhood (two terms) (6)
- C\&T 5118 Infant and toddler development and practice (3)

Methods Courses

- A\&HM 4022
-C\&T4131
The artistic lives of young children (2)
in early development (2)
Integrated curriculum in early childhood education (6)
Field experiences in early childhood/early childhood special education (2)
-C\&1 4708
- C\&T $4131 \quad \begin{aligned} & \text { Language and literacy } \\ & \text { in the early childhood }\end{aligned}$ curriculum (3)
- C\&T 4132 Learning and teaching in the primary reading/writing classroom (or equivalent) (3)
- HBSS 4116 Health education for teachers (1)
- HUDK 4027 Development of math-


## Foundation Courses

- A\&HH 4070 History of education in the U.S. (or equivalent) (3)
- C\&T 4001 Differentiating instruction in inclusive classrooms (2) -C\&T 4114 Multicultural approaches to teaching young children (2)
- C\&T 4119 Issues and interdisciplinary methods for working with parents of young children

> (2) (or equivalent)

Culminating Project:
Students complete an integrated portfolio over the course of the program reflecting their growth as an early childhood teacher.

## Master of Arts

MASTER OF ARTS
Course requirements for M.A. students seeking
initial certification as teachers of students with
Course requirements for M.A. students seeking
initial certification as teachers of students with disabilities in early childhood (birth-8 years):

Core Courses
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[^1]- C\&T 4080
-C\&T 4112 in early childhood (6)
- C\&T 4302 Supervised practicum in the educational assessment of young children with exceptionalities (3)
Field experiences in
-C\&T 4308
-C\&T 4708
- C\&T 5118

Risk and resilience in early development (2) early development (2)
Integrated curriculum early childhood/earlychildhood special education (2)
Student teaching- infancy and early childhood (two terms) (6)
Infant and toddler development and practice (3)

## Methods Courses

- A\&HM 4022

The artistic lives of young children (2)

- C\&T 4131 Language and literacy in the early childhood curriculum (3)
- C\&T 4132 Learning and teaching in the primary reading/writing classroom (or equivalent) (3)
- HBSS 4116 Health education for
- HUDK $4027 \quad \begin{aligned} & \text { teachers (1) } \\ & \text { Development of math- }\end{aligned}$ ematical thinking (3)
- Special education elective (2)
$\qquad$





## Foundation Courses

- HBSE 4001
- C\&T 4001
- C\&T 4083
- C\&T 4119
- C\&T 4615

Culminating Project:
Students complete an integrated portfolio over the course of the program reflecting their growth as an early childhood teacher.

## Dual Certification Program in Early Childhood/Early Childhood Special Education

## (Code: ECSE-DUAL)

Course requirements for M.A. students seeking initial dual certification as both early childhood teachers and teachers of students with disabilities in early childhood (birth-8 years):

## Core Courses

-C\&T 4080

- C\&T 4112 Integrated curriculum
- C\&T 4302 in early childhood (6)
- C\&T 4302 Supervised practicum in the assessment of young children with exceptionalities (3)
- C\&T 4308 Field experiences in early childhood/early childhood special education (2)
- C\&T 4708 Student teaching- infancy and early childhood (two terms) (6)
-C\&T 5308
- C\&T 5118

Advanced practicuminfancy and early childhood (2-3)
Infant and toddler development and practice (3)

## Methods Courses

- A\&HM 4022 The artistic lives of young children (2)
- C\&T 4131 Language and literacy in the early childhood curriculum (3)
- C\&T 4132 Learning and teaching in the primary reading/ writing classroom (or equivalent) (3)
- HBSS 4116 Health education for teachers (1)
- HUDK 4027 Development of mathematical thinking (3)
- Special education elective (2)


## Foundation Courses

- A\&HH 4070 History of education in the U.S. (or equivalent) (3); and
- C\&T 4001 Differentiated instruction in inclusive classrooms (2-3); or
- HBSE 4001 Teaching students with disabilities in inclusive classrooms (2); and
- C\&T 4083 Working with families of young children with disabilities (2); or
- C\&T 4119 Issues and interdisciplinary methods for working with parents of young children (2);
- C\&T 4114 Multicultural approaches to teaching young children (2)
- C\&T 4615 Young children, families, and social policy (2-3)


## Culminating Project:

Students complete an integrated portfolio over the course of the program reflecting their growth as an early childhood teacher.

## Master of Education

Early Childhood Policy
The Master of Education (Ed.M.) with an Early Childhood Policy concentration is designed to give students a firm grounding in early childhood pedagogy, programs, and practice as well as in policy analysis and policy making related to young children and their families. Students will combine theoretical knowledge with practice in the policy field; they will also become familiar with an array of policy issues impacting contemporary child and family life. While the focus of this work is on U.S. policy, there will be opportunity for international and comparative work as well.

## Doctor of Education

## (Early Childhood Education)

At the doctoral level, the specialization in Early Childhood Education prepares candidates for college teaching, research, policy, and other leadership positions in early childhood education. The program is highly selective, aiming to identify and train individuals whose prior education and experience, whether or not it has been specifically in the field of early childhood, gives promise of the ability to develop modes of inquiry suitable to the field's complexities.

## Early Childhood Policy

The Doctor of Education (Ed.D.) concentration in Early Childhood Policy prepares candidates for leadership positions, college teaching, and research in early childhood policy. The concentration is highly selective, aiming to identify and train individuals whose prior education and experience, whether or not it has been specifically in the field of early childhood, gives
promise of the ability to develop modes of inquiry suitable to the field's complexities. Combining rigorous methodological, conceptual, and practical interdisciplinary experiences, the program is designed for those interested in shaping the policy agenda for young children and their families. It is predicated on the principle that undergirding all policy work, candidates must have thorough understandings of both substantive content (early childhood practices, pedagogy, and theory) and research skills. While the focus of this program is on U.S. early childhood policy, there will be opportunity for international and comparative work.

## Early Childhood Special Education

The Department of Curriculum and Teaching offers a doctoral concentration in Early Childhood Special Education, within the Early Childhood Education specialization. This concentration prepares students for careers related to leadership and advocacy in the field, research and scholarship, and higher education and teacher preparation programs. Core courses emphasize theory and foundations in general and special early childhood education and research methods and training. Seminars and advanced practica focus on special topics in the field. Opportunities for involvement in faculty-sponsored research and professional development activities are an integral part of the program concentration.

## Special Application <br> Requirements/Information:

Three programs leading to the Master of Arts degree and initial certification in early childhood and early childhood special education are available through the Department of Curriculum and Teaching: Early Childhood Education, Early Childhood Special Education, and dual certification in Early Childhood General and Early Childhood Special Education. Admission to each of these programs is determined on the basis of academic ability and promise as an early childhood educator as evidenced by prior academic work, letters of reference, and the applicant's own personal statement of purpose.

Admission to programs leading to the Ed.D. degree is determined on the basis of academic ability as evidenced by success in prior academic work and/or other measures of academic aptitude; demonstrable potential for research, field inquiry, or development activities in education; and three years of successful teaching or equivalent experience. All applicants are required to submit Graduate Record Examination (GRE) or Miller Analogies Test (MAT) scores that are no more than five years old, and are required to submit a writing sample. The Department of Curriculum and Teaching evaluates Ed.D. applications twice per year.

All admissions materials must be received by the early or final deadlines as advertised by the College. For information on application deadlines, see the Admissions section of this bulletin.

## Degree Requirements:

## Master of Education <br> (Early Childhood Education Policy Concentration)

The basic curriculum for the Early Childhood Education Policy Concentration consists of three course categories which include:

A total of 45 points that must be taken at Teachers College. First, a set of courses in Curriculum and Teaching will provide the foundation for early childhood pedagogy and practice ( 15 points). Second, courses in Human Development will provide analytic policy training and focus ( 15 points). A third set of course options ( 15 points) is selected in consultation with an advisor.

```
Departmental Requirements:
-C&T4005 Principles of teaching and learning (3)
- C\&T 4113 Early childhood methods
- C\&T 4121 Early childhood teaching strategies within a social context (3)
- C\&T5513 Seminar in early childhood education I (3)
- C\&T 5514 Seminar in early childhood education II (3) or
- C\&T 6502 Studies in curriculum and teaching (3)
```

Policy Concentration Requirements:

- HUDF 4000 Education and public policy (3)
- HUDF 5645 Policy seminar I (3)
- HUDF 5646 Policy seminar II (3)
- HUDM 4122 Probability and statistical inference (3) or
- C\&T 5502 Introduction to qualitative research in curriculum and teaching (3)
- C\&T 6408 Advanced internship: Infancy and early childhood (3)

Electives:
Beyond the core courses, students' programs are individually planned with their advisors, based on their professional goals and interests.

## Doctor of Education

(Early Childhood Education Specialization and Early Childhood Special Education Concentration)
The basic curriculum for Ed.D. students includes:

Core Courses:

- C\&T 5000
- C\&T 5513
- C\&T 5514

Theory and inquiry in curriculum and teaching ( 6 points fall and 3 points spring, of the first year) Seminar in early childhood education I (3)
Seminar in early childhood education II, or one additional 6000 -level research seminar (3)

Research Requirements:
-C\&T 7500
Dissertation seminar in curriculum and teaching I (3)

- HUDM 4122 Probability and statistical inference (3)
Two (2) research methodology courses relevant to the students' research interests.

Students must complete at least two of the required research core courses prior to enrolling in dissertation seminar. The third course may be taken concurrently with Dissertation Seminar.

Other courses are selected in consultation with an advisor. (See Department website for further information.)

## Doctor of Education <br> (Early Childhood Education Policy Concentration)

The basic curriculum for Early Childhood Education Policy concentration includes:

## Required Departmental Core:

- C\&T 5000 Theory and inquiry in curriculum and teaching ( 6 points fall and 3 points spring, of the first year)


## Required Research Core:

- C\&T 5502 Introduction to qualitative research in curriculum and teaching (3) or
- HUDF 5645 Policy seminar I (3)
- C\&T 7500 Dissertation seminar in curriculum and teaching I (3)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)


## Required Early Childhood Policy Concentration:

- C\&T 5513
- C\&T 5514 Seminar in early childhood
- education II (3) or
- C\&T 6502 Studies in curriculum and teaching (3)
- HUDF 4000 Education and public policy (3)
- HUDF 5430 Internship (3)

Other courses are selected in consultation with an advisor.

## ELEMENTARY INCLUSIVE EDUCATION

Acting Program Coordinator:
Dr. Britt Hamre
Program Office: (212) 678-3695
Email: preservice@tc.edu
Website: www.tc.edu/c\&t/ChildEdPre

## Degree Offered:

ELEMENTARY INCLUSIVE EDUCATION. initial certification (ELEM-INIT)
Master of Arts (M.A.)

## Program Description:

This program prepares teachers to teach all children, particularly in urban contexts. The course of study emphasizes curriculum development for heterogeneous classrooms, critical multiculturalism, teaching for equity and social justice, and an inquiry approach to teaching and learning. Because the program prepares teachers for inclusive classrooms, it is possible to add on an additional 12 points in critical special education and be recommended for the additional certification: Teaching Students with Disabilities. (See next section for details.)

This is a 40 -point M.A. initial program for applicants with little or no teaching experience or preparation who are seeking certification at the elementary level, grades 1-6. The M.A. initial program includes a professional student-teaching sequence from September through May.

Students may complete the program on a full-time or part-time basis; students have the option to complete the program with an accelerated schedule (an academic year plus preceding and following summer sessions) or to extend their program over $2-5$ years. Students planning to student teach are required to file a Declaration of Intention to Student Teach (available from the Program Office) by April 1 prior to the fall term in which they plan to begin student teaching. A non-refundable deposit of $\$ 150.00$ is also required. Two courses are required to be taken before beginning the professional sequence: C\&T 4143 and C\&T 4000.

New York State and the Initial Program require that degree/teacher certification candidates complete a distribution of liberal arts coursework at either the graduate or undergraduate levels. This includes a minimum of

6 points in each of the following domains: English, Mathematics, Social Science, Science, and two-term length courses in a language other than English (proven proficiency may substitute for coursework in language). In addition, those seeking New York State certification must demonstrate knowledge of technology and experience in the arts.
This requirement can be satisfied by:

1. Transcript review of coursework taken prior to entering Teachers College;
2. Elective coursework taken at Teachers College either as a part of or in addition to the 40 points required for the degree;
3. Graduate or undergraduate coursework taken elsewhere, in consultation with faculty, while completing the Teachers College degree; these would be in addition to Preservice Program degree requirements;
4. Successful completion of the College Level Examination Program (CLEP) test can be substituted for coursework in a second language, or in each of the liberal arts subjects.

Please note that for states other than New York, requirements for certification may be different. It is up to the student to be aware of any additional provisions. Contact the applicable State Education Departments for current certification requirements.


## Special Application

Requirements/Information:
All admissions materials must be received by the early or final deadlines as advertised by the College. Those who complete their applications after the early deadline may not have the opportunity to begin student teaching in their first year, even if admitted. For information on application deadlines, see the Admissions section of this bulletin.

## Degree Requirements:

The basic curriculum for M.A. Elementary Preservice students includes:

- The Integrating Core, which includes such topics as teaching methods, teaching in urban and culturally diverse settings, curriculum development, multicultural education, alternative models of teaching, and classroom management and organization (designated C\&T 4123, C\&T 4726, and C\&T 4124.) Students complete the Integrating Core concurrently with the student teaching semesters. In addition to the Integrating Core, which accounts for approximately half of the 40 points required, the following courses are required for certification and the master's degree:
- One course in educational foundations (2-3)*, philosophical, historical, sociological, child development, etc.
- C\&T 4143, Multicultural social studies in the elementary and middle schools (3)
- Two courses in methods of teaching literacy (3): C\&T 4132 and C\&T 4133 to be taken in conjunction with student teaching
- One literacy elective
- One course in methods of teaching mathematics (3): MSTM 5010, Mathematics in the elementary school
- One course in methods of teaching science
- C\&T 4000, Disability in contexts (3)
- HBSS 4116, Health education for teachers
* Students with appropriate undergraduate courses in these areas may be eligible for a waiver of these requirements. Minimum point requirements for the degree will not be reduced. Please consult with faculty.
- C\&T 4000 and C\&T 4143 must be taken prior to student teaching.


## ELEMENTARY INCLUSIVE EDUCATION AND TEACHING STUDENTS WITH DISABLITIES

(DUAL-CERTIFICATE PRESERVICE PROGRAM)
Program Coordinators:
Dr. Britt Hamre and Professor Celia Oyler
Program Office: (212) 678-3695
Email: preservice@tc.edu
Website: www.tc.columbia.edu/C\&T/
Child-EdPre/index.asp

## Degree Offered:

ELEMENTARY INCLUSIVE EDUCATION AND TEACHING STUDENTS WITH DISABILITIES. initial dual certification (ELEM-DUAL)

## Master of Arts (M.A.)

## Program Description:

The dual certification program is designed for students who do not hold any teaching certification. This 52 -point M.A. program builds upon the 40 -point Elementary Inclusive Program. After completing the 40 -point program, students enroll in a special one semester critical special education core which offers capstone courses toward the Teaching Students with Disabilities certification (grades 1-6).

The program prepares teachers for co-teaching, planning differentiated curriculum, working in diverse cultural contexts, collaborative team planning, and community-based student advocacy and problem-solving. This focus builds upon the foundation in equity, social justice, and multicultural pedagogy from the Elementary Inclusive Program.

The requirements for this program are the same for the Elementary Inclusive Program, with one exception: instead of a literacy elective, students in the dual certification program are required to enroll in an assessment course: C\&T 4301. (Please note the requirements and deadlines for the Elementary Inclusive Program are the same for the dual certification program.)

## Critical Special Education Core:

- C\&T 4311 Disability studies practicum: School based (3)
- C\&T 5080 Access to full participation in schools (3)
- C\&T 5905 Discourses in disability (3)
- C\&T 5081 Collaborative communication in cultural contexts (3)


## GIFTED <br> EDUCATION

Program Coordinator:
Professor James Borland
Program Office: (212) 678-3765
Email: borland@tc.edu
Website: www.tc.edu/c\&t/GiftedEd

## Degrees Offered:

GIFTED EDUCATION EXTENSION CERTIFICATION (GIFT-EXT)
Master of Arts (M.A.)
ELEMENTARY INCLUSIVE EDUCATIONINITIAL CERTIFICATION WITH GIFTED EXTENSION (ELGF-DUAL)
Master of Arts (M.A.)
Please note: The Ed.D. with a concentration in Gifted Education is available through Curriculum and Teaching (see page 87).

## Program Description:

Students who are interested in gifted education have two options on the M.A. level at Teachers College.

Those with no background in education can obtain the extension in gifted education as well as certification as an elementary school teacher through the Elementary Inclusive Education Program with the gifted extension (ELGF-DUAL). This option allows students in the Elementary Inclusive Education Program to receive the New York State certificate extension in gifted education along with their initial elementary education certification by including 12 credits in gifted education in their course of study. Students who choose this option complete an additional semester of student teaching ( 4 credits) in a gifted education setting, which can be an inclusive setting, along with three courses in gifted education. See program description below.

The M.A. certification program in the Education of Gifted Students (GIFT-EXT) is designed for students who have graduated from an accredited teacher education program and who hold an initial teaching certificate. Graduates of the program are recommended for the New York State certificate extension in Gifted Education. Thus, completion of this program provides students with both certification in gifted education and knowledge relating to the nature, needs, and pedagogy of gifted students that contributes to greater effectiveness as a teacher in a variety of situations.

## Special Application <br> Requirements/Information:

Admission to programs leading to the M.A. degree is determined on the basis of academic ability as evidenced by success in prior academic work and/or other measures of academic aptitude and demonstrable potential for excellence in teaching or development activities in education. The Graduate Record Examination (GRE) or Miller Analogies Test (MAT) is not required for admission to the M.A. programs. The Department of Curriculum and Teaching evaluates M.A. applications three times per year. For information on application deadlines, see the Admissions section of this bulletin.

Professional Certification Program leading to the Extension in Gifted Education (32 points):

The Nature of Giftedness (7-12)
Required Courses:

- C\&T $4021 \quad$ Nature and needs of gifted students (2-3)
- C\&T 4026 Exceptionality and intelligence
- C\&T 5506 (2-3)
Seminar in gifted education (3)
Elective Course:
- C\&T 4025 Educating young potentially gifted children (2-3)

Teaching Gifted Students (6-8)
Required Courses:

- C\&T 4023 Differentiated curriculum for gifted students (2-3)
- C\&T 4022 Instructional models in the education of gifted students (1-2)
- C\&T 4024 Planning and implementing programs for gifted students (3)

Out-of-Program Requirements (9-16)
Additional courses to be determined in consultation with your advisor.

Field Placement (3)

- C\&T 4702

Student teaching-giftedness (3)

- C\&T 5302 Advanced practicum-
giftedness (3)
Culminating Project (0)
A culminating project, arranged in consultation with your advisor, that demonstrates your ability to integrate your theoretical knowledge with practical problems and issues in gifted education.


## Degree Requirements:

Elementary Inclusive Education Initial Certification with Gifted Extension (48 points)

The gifted education extension option allows students in the Elementary Inclusive Education

Program to receive the New York State extension in gifted education along with their initial elementary education certification by including 12 credits in gifted education in their course of study. Students who choose this option complete an additional semester of student teaching ( 3 credits) in a gifted education setting, which can be an inclusive setting, along with three courses in gifted education. This is a 52 -point M.A. program.

Students who are interested in entering this program can choose this option either when they apply for admission to the Elementary Inclusive Education Program, by designating the extension on their applications, or by informing Professor Borland and Professor Oyler of their intention to pursue the extension once they have matriculated in the Elementary Inclusive Education Program.

Since the extension program combines course and requirements from the Elementary Inclusive Education Program and the Program in Gifted Education, advisement is provided by the faculty of both programs. Faculty in the Program in Gifted Education advise students on matters related to courses in gifted education, student teaching in gifted education, and the culminating project.

If students have any questions about the extension program, they should get in touch with Professor Borland at jhb27@columbia.edu.

Course Requirements for the 48-credit Gifted Education Extension

| Foundation and Methods Courses: |  |
| :---: | :---: |
| - C\&T 4000 | Disability, exclusion, and schooling** (3) |
| - C\&T 4143 | Multicultural social studies** (3) |
| - MSTC 5010 | Math methods (3) |
| - MSTC 4040 | Science methods (3) |
| - HBSS 4116 | Health education for teachers (1) |
| - Varies | Educational foundations (philosophy/social science in education or child development) (2) |
| Student Teaching Semesters: |  |
| - C\&T 4123 | Core: Inclusive curriculum and instruction (fall) (3) |
| - C\&T 4123 | Core: Inclusive curriculum development (spring) (3) |
| - C\&T 4726 | Professional lab experience (year-long course) Practica and student teaching (8) |
| - C\&T 4702 | Student teaching: Giftedness (3) |
| - C\&T 4133/2 | Literacy methods (fall and spring) (6) |
| - Varies | Literacy elective (2) |

## Gifted Education Courses

Nine credits from any of the following:

- C\&T $4021 \quad$ Nature and needs of gifted students ( $2-3$ credits)
- C\&T 4022 Instructional models in the education of gifted students ( $1-3$ credits)
- C\&T 4023 Differentiated curriculum for gifted students ( $2-3$ credits)
- C\&T 4024 Planning and implementing programs for gifted students (3 credits)
- C\&T 4026 Giftedness and intelligence (2-3 credits)

Each student's academic progress is reviewed by the faculty of the Program in Gifted Education and the Elementary Inclusive Program. Students must achieve average grades to continue in the program. Specifically, this means that one must have a " B " average in all courses to be allowed into student teaching. If a student receives any course grade of less than a "B-," he or she must meet with faculty.

During the Elementary Inclusive Education Program student-teaching year, students must achieve a grade of "B-" or better in Core and must receive a "Pass" on their fall student teaching portfolio in order to continue onto the spring semester.

Culminating Project:
The culminating project in the Gifted Education Extension Program in the Elementary Inclusive Education Program consists of a pro-fessional-development portfolio. This portfolio documents a student's professional growth as an educator over a period of time of his or her choosing but which must include the period in which he or she is a student at Teachers College. The student is responsible for designing, compiling, managing, and submitting the portfolio to Professor Borland as a requirement for graduation.

## LITERACY SPECIALIST (BIRTH-GRADE 6)

Program Coordinators:
Professors Lucy Calkins and Marjorie Siegel
Program Office: (212) 678-3931 or 3401
Email:
calkins@tc.edu or siegel@tc.edu
Website: www.tc.edu/c\&t/Literacy

## Degree Offered:

LITERACY SPECIALISTinitial certification (LITI-INIT)
Master of Arts (M.A.)

## Program Description:

The M.A. in literacy education is a 32 -point program leading to New York State certification as a Literacy Specialist. This program is designed to immerse the literacy educator in an intense study of practice, theory, and research. The eventual goal is to equip each participant to assume a leadership role in literacy education. The program regards the teaching of reading and writing as complex undertakings, and strives to equip its students to teach well. Students investigate individual literacy learning, group literacy learning, teacher development, community partnerships, institutional change and other contemporary and political issues facing literacy education. The program assumes that teachers' own literacy work will be a source of knowledge and inspiration in their teaching. Students write creatively as well as professionally, participate in their own reading clubs, and keep portfolios of their own reading and writing development. The TC faculty in literacy has a long history of social action with areas of special interest that include content area literacies, curriculum development in reading and writing, children's literature, school reform, ethnographic studies of literacy, teacher development, process approaches to reading and writing, and the impact of class, race, and gender on literacy learning. Students participate in challenging courses, engage in readings, learn from mentorships, and conduct their own actionresearch projects in which they demonstrate their abilities to synthesize theory and practice and to weave the two throughout their individual work.

Teachers College students enrolled in the Literacy Specialist program have the opportunity to work with the Teachers College Reading and Writing Project- a think-tank and professional development organization that works in field-based ways with schools throughout New York City and the nation. Students can
intern in both high-need and state-of-the-art schools, apprentice with mentor teachers, research staff development and school reform, and participate in any of more than 100 fullday conferences offered each year.

Candidates who wish to research and improve their own literacy teaching or serve in leadership positions to help others do the same are encouraged to apply, as are those who intend to engage in scholarly work and continue their education through the doctoral level.

## Special Application Requirements/Information:

All admissions materials must be received by the early or final deadlines as advertised by the College. For information on application deadlines, see the Admissions section of this bulletin.

## Degree Requirements:

Students may enroll in the program full-time or part-time. The basic curriculum for M.A. students includes:
Core: Required of all students (23 points)

- C\&T 4138 Teaching literacy in
- C\&T 4139 the early years (2-3)

C\&1 4139 Constructing critical readers (2-3)

- C\&T 4151 Teaching of writing (2-3)
- C\&T 4200 Fieldwork in curriculum and teaching (6) 3 credits fall; 3 credits spring
- HBSK 4072 Theory and techniques of reading assessment and intervention (3)
- C\&T 4140 Literature for younger children (2-3) or
- C\&T 4141 Literature for older children (2-3)
- C\&T 5037 Literacy, culture, and the teaching of reading (2-3)

Master's Action Research Project:
Required of all students (1 point)

- C\&T 4502 Master's project (1)

Completion of Master's Action
Research Project
Out of Program Selectives: Required of all students (4-6 points) To satisfy the college breadth requirement, students must complete two Teachers College courses in addition to HBSK 4072, which is part of the core. (A course for this purpose is defined as one in which a minimum of 2 points is earned outside the program).

- A\&HE 4052 Adolescents and
literature (3)
- A\&HL 4001

Sociolinguistics and education (3)

- A\&HT 4077 TESOL classroom practices (3)
- ITSF 4013
- ITSF 4015
- ITSF 4028
- MSTU 4049

Literacy and development (2-3) Introduction to computers, language, and literacy (2-3) Teaching literacy in bilingual settings (3) Technologies and literacies (2-3)

Within-Department Selectives: Required of all students (4 points)

Students must select at least two courses from the following list:

| - C\&T 4858 | Institute: Teaching of <br> reading (3) |
| :--- | :--- |
| - C\&T 5800 | Institute: Teaching of <br> writing (1,3, 6) |
|  | Either: |
| - C\&T 4137 | Literacy and learning in <br> the content areas (2-3) or |
| - C\&T 4842 | Institute: Content area <br> literacies (2-3) | reading (3) writing $(1,3,6)$ Either:



## TEACHING STUDENTS WITH DISABILITIES: LEARNING DISABILITIES (GRADES 5-9 OR 7-12)

Program Coordinator:
Dr. Britt Hamre
(Acting, 2010-2011 School Year)

$$
\begin{array}{ll}
\text { Program Office: } & \text { (212) 678-3695 } \\
\text { Email: } & \text { Preservice@tc.edu }
\end{array}
$$

Website: www.tc.edu/teachingresidents

## Degree Offered:

TEACHING STUDENTS WITH DISABILITIES. learning disabilities (CUIS)
Master of Arts (M.A.)

## Program Description:

The Teaching Students with Disabilities: Learning Disabilities Program is both a graduate program and a professional course of study. This rigorous academic program is designed primarily for those who have no (or minimal) formal preparation or coursework in education and are beginning their study of teaching. The program leads to an M.A. degree and New York State teacher certification.

The M.A. in Teaching Students with Disabilities: Learning Disabilities is a 38 -point program leading to New York State certification for grades 5-9 (Generalist) or 7-12 (Subject Area Specialization).

This program prepares teachers to teach all children, particularly in urban contexts. The New York State and the Teaching Students With Disabilities Program require that degree/ teacher certification candidates complete a distribution of liberal arts coursework at either the graduate or undergraduate levels. This includes a minimum of 6 points in each of the following domains: English, Mathematics, Social Science, Science, and two-term length courses in a language other than English (proven proficiency may substitute for coursework in language). In addition, those seeking New York State certification must demonstrate knowledge of technology and experience in the arts.

## This requirement can be satisfied by:

1. Transcript review of coursework taken prior to entering Teachers College;
2. Elective coursework taken at Teachers College either as a part of or in addition to the 38 points required for the degree; 3. Graduate or undergraduate coursework taken elsewhere, in consultation with faculty,
while completing the Teachers College degree; these would be in addition to Preservice Program degree requirements; 4. Successful completion of the College Level Examination Program (CLEP) test can be substituted for coursework in a second language or in each of the liberal arts subjects.

## Special Application <br> Requirements/Information:

Acceptance to the program requires strong academic credentials, articulate and thoughtful writing, strong and relevant professional or academic references, and a clear fit between program goals and the goals expressed by the applicant. At a minimum, applicants should have a GPA of 3.0 or above and evidence a commitment to educational equity and diversity. We look for prior experience working with children and/or youth.

## Degree Requirements:

- A\&HH 4076
- C\&T 4200
-C\&T 4052
- C\&T 4000
- HBSK 4072
-C\&T 5037
- C\&T 4001 Differentiating instruction
- C\&T 5080 Access to full participation in schools
- C\&T 5081 Collaborative communication in cultural contexts
- C\&T 4047 Socio-cultural approaches to teaching students with learning disabilities
- C\&T 4501 Teaching and learning in the multicultural classroom
- 1 credit workshop on Special Education Policies and Laws
- 1 credit workshop on Assistive Technologies
- Student teaching/residency
- Completion of Master's action research project


## COURSES:

C\&T 4000. Disability in contexts (3) Inclusive Education Staff. For students preparing to be both general and special-education teachers. Exploration of the historical, legal, cultural, and social/emotional experiences and representations of the characteristics of people across the full range of disabilities. The course focuses on life contexts, including education, family (caregiver), employment, and independent living as well as lifespan transitions. It draws on a wide range of interdisciplinary scholarship and ways of knowing.

C\&T 4001. Differentiating instruction in inclusive classrooms (2-3) Inclusive Education Staff. For students preparing to be both general and special-education teachers. This course is designed to foster collaborative, problem-solving relationships among general and special education teachers and student families in designing and modeling inclusive pedagogies and practices for diverse learners. It also overviews the classroom uses of assistive instructional technologies and other accommodations in a laboratory format.

## C\&T 4002. Curriculum theory and history

 (3)Professor Lesko. The nature and design of educational activities: theory, research, and practice of curriculum design.

C\&T 4004. School change (3)
Professors Hatch or Knight. Major themes include state of the field regarding school change, schools as social organizations, the individual in the organization, theories of change, and implementation strategies and processes.

## C\&T 4005. Principles of teaching

 and learning (3-4)Faculty. Examination of the relationships among teaching, learning, and assessment; teaching as a profession; and schools as complex social organizations.

C\&T 4020. The environments of school (2-3)
Faculty. Space, objects, and territoriality; school and classroom size; the environment as hidden curriculum; risk and stress in school; interrelationship of the cognitive, social and physical conditions and outcomes of schools and classrooms.

C\&T 4021. Nature and needs of gifted students (2-3)
Professor Borland or Dr. Wright. Psychological factors, personal and social, affecting identification and development of gifted children and youth; implications for education, counseling and guidance.

C\&T 4022. Instructional models in the education of gifted students (2-3) Professor Borland. A review and application of special instructional systems for educating the gifted. Special attention devoted to frameworks developed by Bloom, Gordon, Parnes, Renzulli, Stanley, Tannenbaum, and Taylor. Course also offered as summer workshop C\&T 4822.

## C\&T 4023. Differentiated curriculum for gifted students (2-3)

Dr. Wright. This course examines the characteristics of appropriate and defensible curriculum for gifted children and youth. Particular emphasis is placed on instructional strategies, curriculum theories, flexible grouping tech-
niques, and meeting the needs of gifted learning in the regular classroom.

## C\&T 4025. Educating young potentially

 gifted children (2-3)Dr. Wright. Examination of theories and practices relevant to the education of the young (preschool through second grade) potentially gifted child with particular focus on talent development, differentiated curriculum, nontraditional identification techniques, at-risk children, and parent education.

C\&T 4029. Creativity: Its nature and nurture (2-3)
Faculty. An examination and critical appraisal of theories of creativity, test development to measure creativity, and methods designed to enhance the creativity of children and adults.

C\&T 4032. Gender, difference, and curriculum (3)
Professor Lesko. This course offers a multifaceted, interdisciplinary introduction to thinking about school curricula, policies, and practices as gendered. Gender will not be considered in isolation but as interwoven and complicated with cultural, racial, religious, class, and sexual identities, among others. The course materials will move beyond the identification of the problems to examine various efforts to create gender-sensitive curricula and programs.

C\&T 4047. Socio-cultural approaches to teaching students with learning disabilities (2-3)
Planning and implementing sociocultural, multicultural, and inquiry-based procedures for teaching students with substantial academic difficulties and for monitoring that instruction in a range of school environments. Emphasis is on classroom discourse and includes both oral and written language instruction.

C\&T 4051. Supervision for elementary and secondary schools (2-3)
Faculty. Theory and practice of supervision in elementary and secondary schools. Emphasis is on the role of the supervisor in improvement of instruction and curriculum development. Students practice techniques for improving supervisory skills through role playing, case studies, and analysis of teaching. Attention given to creating programs for continuous professional growth of elementary and secondary school teachers, paraprofessionals, and leadership personnel.

## C\&T 4052. Designing curriculum and instruction (2-3)

Professors Lesko, Goodwin, Zumwalt, and staff. Application of models for designing curriculum and instruction. Students design curriculum in collaborative groups.

## C\&T 4078. Curriculum and teaching

 in urban areas (2-3)Professor Knight. Analysis of social context and resources for curriculum and teaching in urban areas.

C\&T 4080. Risk and resilience in early development (2-3)
Professor Recchia and Dr. Sall. A first course in child development, pre-birth through age 8 , within a family context. Primary focus is on the impact of risk and disability on developmental outcomes, and those factors that promote resilience in young children, with and without disabilities, and their families.

C\&T 4083. Working with families of young children with disabilities (2-3)
Professor Recchia or faculty. This course offers current and historical perspectives on the role of families in the lives of young children with special needs, with a focus on family structures, resources, and concerns. Students will explore strategies for facilitating partnerships between families and professionals that support the developmental and educational needs of young children with disabilities.

C\&T 4112. Integrated curriculum in early childhood education (full-year course) (6) Professors Genishi, Recchia, Shreyar, Dr. Sall, and faculty. A two-semester course focused on integrated theories and methods in ECE/ ECSE. Will incorporate historical and sociocultural contexts, emphasis on physical and interpersonal environments in early childhood settings, centrality of play, social studies and science, adapting curricula for full range of abilities from infancy through grade 2.

## C\&T 4113. Early childhood methods

 and programs (3)Faculty. Comparative study of traditional, current, and innovative program models designed for children from birth through 8 years of age.

C\&T 4114. Multicultural approaches to teaching young children (2-3)
Faculty. Analysis of major curriculum models for learning in young children through use of culturally and environmentally-derived content.

C\&T 4117. Play: The roots of competence in young children (3)
Faculty. The origins of play and related aspects of development with implications for practice.

C\&T 4119. Issues and interdisciplinary methods for working with parents of young children (2-3)
Dr. Hoffman. Issues such as separation, problematic behaviors, and assessment are examined in the development of interdisciplinary strategies for working with parents of young children, with and without disabilities. Sessions are taught by an interdisciplinary team of faculty and invited speakers from special education, clinical psychology, early childhood education, psychiatry, pediatrics, and social work.

C\&T 4121. Early childhood teaching strategies within a social context (2-3) Faculty. Exploration of the teaching strategies used in early childhood education through
analysis of the social contexts out of which they have arisen. Emphasis on assimilation and application of differing strategies through workshop format.

C\&T 4122. Issues in parenthood and education (2-3)
Dr. Hoffman. Examination of relevant theory and research on parent development. Topics include transition to parenthood, pregnancy, parenting children of different ages, at-risk parents, parenting the special needs child, and single parenthood. Methods of working with different parent populations are addressed.

C\&T 4123. Curriculum and instruction in elementary inclusive education (3) Inclusive Education Faculty. Permission required. An introduction to teaching, learning, and curriculum in elementary classrooms, including: learning processes, instructional planning, child observation and assessment, classroom management and environments, working in urban, diverse, and inclusive settings, and culture and community. The course emphasizes the relationship between theory and practice, and supports students in the development of self-analytic, reflective, and problem solving skills. Special fee: $\$ 100$.

## C\&T 4124. Curriculum development

 in elementary inclusive education (3) Inclusive Education Faculty. Permission required. Continuation and extension of C\&T 4123 , with an emphasis on curriculum design issues, standards, and multi-level curriculum development. Students work in teams to develop multi-grade/age curriculum.C\&T 4130. Critical perspectives in elementary education (2-3)
Professor Zumwalt or faculty. Required for all professional certification M.A. students (elementary). Co-requisite: C\&T 4502 (section 1). Examination of issues related to contemporary elementary education in the United States from the perspective of teacher as a reflective practitioner and curriculum maker, with a focus on teaching for social justice. Designed to complement students' master's action research projects.

C\&T 4131. Language and literacy in the early childhood curriculum (3) Professor Genishi. Introduction to research and practices related to early communication and literacy in early childhood settings (birth through grade 2). Focus will be on children whose first language is English, as well as English language learners, and on curricula and adaptations for full range of learners. ( 3 credits toward state literacy requirement).

## C\&T 4132. Learning and teaching in

the primary reading/writing classroom (3) Professors Calkins and Siegel. Permission required. Examines principles of literacy learning in young children and introduces theories, practices, and materials for teaching reading/ writing in primary grades.

C\&T 4133. Learning and teaching in the intermediate reading/writing classroom (3) Professors Calkins and Siegel. Permission required. Examines strategies for teaching, organizing, and assessing reading and writing in intermediate grades.

C\&T 4136. Methods and materials for reading instruction (2-3)
Faculty. A survey of approaches to reading instruction from kindergarten through middle school with a critical examination of modern methods, materials, trends, and issues.

C\&T 4137. Literacy and learning in the content areas (2-3)
Professor Siegel. Introduction to theory, research, and practice on the role of literacy in learning mathematics, social studies, science, and the arts. Examination of talk, texts, and reading/writing practices used in content area teaching.

## C\&T 4138. Teaching literacy in the

 early years (2-3)Professor Siegel. Examination of theory, research, and practice of literacy learning and teaching in the early years, including children who are English language learners and children experiencing difficulty with school literacy. Emphasis on alternative models of designing literacy curricula, selection and use of materials (including technologies), and methods of assessing and teaching decoding, spelling, fluency, text use, and comprehension.

## C\&T 4139. Constructing critical readers

 (2-3)Professors Calkins and Siegel. Prerequisite: C\&T 4138. Examination of theory and practice on teaching reading in intermediate grade classrooms. Consideration of curriculum design, assessment practices, teaching methods and children's literature. Emphasis on curricular structures and strategies for teaching comprehension and critical analysis of fiction and nonfiction texts.

## C\&T 4140. Literature for younger

## children (2-3)

Faculty. Critical study of literary trends and materials for children in prekindergarten, kindergarten, and early grades. Consideration of developmental issues and reader response theory relating to young children.

C\&T 4141. Literature for older children (2-3)
Professor Calkins. The course integrates theory and practice for teachers. Topics include writing development, research on writing, models for responding to and evaluating student writing, and classroom methods for teaching the writing process in elementary classrooms.

C\&T 4143. Multicultural social studies in the elementary and middle school (1-3) Inclusive Education Faculty. Permission required. Teaching, learning, and curriculum
development in social studies including a critical examination of content and methodology, current practices and issues, state, and professional standards. Materials fee: $\$ 20$.

C\&T 4145. Critical perspectives in secondary education (2-3)
Professors Knight and Lesko. A comprehensive examination of adolescent development and learning as they relate to issues of curriculum, teaching, and learning.

C\&T 4151. Teaching of writing (2-3)
Professor Calkins. The course integrates theory and practice for teachers. Topics include writing development, research on writing, curriculum development, methods of teaching writing, models for responding to and evaluating student writing, and classroom methods for teaching the writing process in elementary classrooms.

C\&T 4159. Teacher education programs (2-3)
Faculty. Current developments in programs for the preparation and professional development of teachers for elementary and secondary schools.

## C\&T 4160. Supervision in initial teacher

 education programs (2-3)Faculty. Theory and practice of supervision of student teachers. This course will help students develop supervisory skills through case studies, role playing, and analysis of teaching.

C\&T 4161. The teacher: Socio-historical, cultural contexts of teaching (2-3)
Professor Zumwalt or faculty. Exploration of what it means to be a teacher through analysis of historical studies, teacher autobiographies, proposals for change, and personal reflection. Focus questions are: What is a good teacher? What is a professional teacher? Prerequisite: PreK-12 teaching experience.

## C\&T 4200. Fieldwork in curriculum

 and teaching (1-4)Faculty. Permission required. Majors work under guidance. Students should have had previous coursework with their supervising staff member and should select a problem relating to this work.

C\&T 4301. Formal assessment of exceptional students (2-3)
Faculty. Permission required. Participation in educational assessment of referred children. Analysis of observational and standardized test data; formulation of educational enrichments, accommodations, and modifications. Conducted in the Dean Hope Center for Educational and Psychological Services or in appropriate community facilities. Course meets double sessions. Lab fee: $\$ 150$.

C\&T 4302. Supervised practicum in the educational assessment of young children with exceptionalities (2-3)
Dr. Rikhye or faculty. Permission required.
Prerequisite: C\&T 4080. Participation in educational assessment of young children with excep-
tionalities. An introduction to formal and informal assessment strategies and their applications to work with young children. Analysis of observational and test data; formulation of educational interventions. Lab fee: $\$ 150$.

C\&T 4308. Field experiences in early childhood/early childhood special education (2) Professor Recchia or faculty. A practicum for students in the Early Childhood initial certification program that serves as a prerequisite for student teaching. Field experiences will relate to work in other courses and be paired with an ongoing seminar designed to respond directly to issues as they arise in field placements.

## C\&T 4311. Advanced practicum-

teaching students with disabilities (3)
Inclusive Education Faculty. Permission required. Part-time practicum in New York City schools, coupled with critical special education core classes. Co-requisites: C\&T 5080, 5081, and 5905.

C\&T 4501. Teaching and learning in the multicultural classroom (0-2)
Faculty and staff. Student diversity (characterized by gender, race, ethnicity, language, special needs, and sexual orientation) is examined in relation to decisions about methodology, curriculum, instructional materials, student grouping, home-school-community relationships, and teachers' professional growth and development.

C\&T 4502. Master's project (0-1) Professors Knight, Lesko, Zumwalt, or faculty. Permission required. Required for M.A. students in the Curriculum and Teaching Program. Students work to develop proposals to initiate required Master's action research project.

C\&T 4503. Problems: Curriculum and teaching-independent study (1-3)
Faculty. Permission required. Majors work individually or in small groups with a staff member. Students should have had previous coursework with their supervising staff member and should select a problem relating to this work.

C\&T 4615. Young children and social policy: Issues and problems (2-3)
Dr. Fennimore. Overview of social policy towards young children as it affects classroom practice and professional goals. Situations such as child abuse, divorce and custody, student classification, and foster care are examined.

C\&T 4702. Student teaching-giftedness (3) Dr. Wright. Observation and student teaching. Permission required. Course requires 3-5 days a week for participation in community, school, and agency programs and a weekly seminar on campus.

C\&T 4708. Student teaching-early childhood (2-3)
Dr. Rikhye or faculty. Observation and student teaching. Permission required. This two-course sequence requires $3-5$ days a week for participa-
tion in community, school, and agency programs and a weekly seminar on campus.

## C\&T 4726. Professional laboratory

 experiences/student teaching (year-long) in elementary education (4-6) Inclusive Education Faculty. Permission required. Students must begin in the fall term. Students engage in an intensive field placement under the sponsorship of a classroom teacher with supervision shared by the cooperating teacher and Teachers College staff members. The experience begins with a three-week practicum period, followed by a ten-week student teaching experience; students spend a minimum of $31 / 2$ days in the classroom each week. Assignments to classrooms provide an emphasis on education for both younger and older children in a range of urban settings, including opportunities in the College's Professional Development Schools. Offered in conjunction with C\&T 4123 and C\&T 4124. Students applying to student teach must file a Declaration of Intention to Student Teach by April 15th prior to the fall term.C\&T 4729. Professional laboratory experiences/student teaching (semesterlong) in elementary education (4-6) Inclusive Education Faculty. Permission required. Students engage in an intensive field placement under the sponsorship of a classroom teacher with supervision shared by the cooperating teacher and Teachers College staff members. The experience begins with a threeweek practicum period, followed by a tenweek student teaching experience; students spend a minimum of $31 / 2$ days in the classroom each week. Assignments to classrooms provide an emphasis on education for both younger and older children in a range of urban settings, including opportunities in the College's professional development schools. Students applying to student teach must file a Declaration of Intention to Student Teach by April 15th prior to the fall term.

## C\&T 4842. Institute: Content area

literacies (2-3)
Professor Siegel. Introduces K-12 teachers to a toolkit of theories and practices to aid them in rethinking and redesigning literacy practices used in teaching mathematics, science, social studies, and other content areas.

C\&T 4858 Institute: Teaching of reading (1 or 3)
Professor Calkins. Designed to help teachers of grades K-8 develop a theoretical framework for the teaching of reading and a repertoire of strategies for enhancing students' independence and skills as readers.

C\&T 4899. Federal Policy Institute (3)
Professor Kagan. The Federal Policy Institute (FPI) is designed to give students a first-hand opportunity to meet with key policy leaders around the most crucial, contemporary policy issues. Key themes will include: the enduring values of American education and how they
shape current policy; current issues in national educational reform; and the role of the federal government in shaping educational policy.

C\&T 4900. Research and independent study: Curriculum and teaching (1-8) Faculty. Master's degree students undertake research and independent study under the direction of a faculty member.

C\&T 5000. Theory and inquiry in curriculum and teaching (Total of 9 points, 6 points fall and 3 points spring) Faculty. Required of and limited to firstyear Ed.D. students in the Department of Curriculum and Teaching; must be taken in both the fall and spring semesters. Introduction to and exploration of important problems and issues in curriculum and teaching, methods of formulating questions, and modes of inquiry appropriate to doctoral-level research.

## C\&T 5006. Readiness for school:

Pedagogical and political issues (3)
Professor Kagan. Course examines different conceptions of school readiness, focusing on challenges faced by practitioners and policy makers. Participants will examine different approaches to the implementation and assessment of readiness.

C\&T 5023. Giftedness and intelligence: Theoretical approaches (2-3) Professor Borland. Theories of cognition as they relate to the issues of intelligence and creativity presented as a basis for conceiving of students as exceptional and for differentiating their curriculum.

C\&T 5024. Planning and implementing programs for gifted students (3) Professor Borland. Examination of factors affecting planning and implementation of programs for the gifted, components of gifted programs, and systems approach to program planning. Students develop written program plans for specific settings.

C\&T 5036. Child and family policy (2-3)
Professor Kagan. Course provides a foundation of knowledge concerning the role of child and family perspectives in informing public policy.

## C\&T 5037. Literacy, culture and the

 teaching of reading (2-3)Professor Siegel. Examines current practices of reading instruction in light of theory and research on literacy as a social, cultural, and political practice. Emphasis on intersections of class, race/ethnicity, gender, and sexuality as critical axes for understanding culturallyspecific language and literacy practices, and as a basis for re-imagining reading instruction rooted in the experiences of students.

## C\&T 5042. Special topics in children's

 literature (2-3)Faculty. Study of specific genres or curriculum issues in children's literature. Topics are
announced in course schedules distributed each semester. Registration not limited to one term.

## C\&T 5053. Staff development processes and procedures (3)

Faculty. Concepts and practices related to staff development, professional education, and organizational improvement. Attention given to applications of staff development using institutional cooperation, organizational dynamics, and research on teacher training. Designed for principals, supervisors, curriculum directors, and others concerned with staff and program development to deal with change in their own institutional contexts.

## C\&T 5074. Curriculum and teaching

 policy (3)Faculty and staff. Prerequisite: C\&T 4004. Examination of the theoretical and political bases of curriculum and teaching policies and their influences on school organizations and teaching practices. Explores the policy-making process from policy design through implementation.

## C\&T 5080. Access to full participation

 in schoolsProfessor Naraian. This course is designed to offer an in-depth understanding of issues that frame the participation of students with disabilities in various educational settings. It will critically examine the legal and structural framework that regulates the education of students with disabilities. This course will explore current pedagogical practices within the field of special education, while it simultaneously seeks to build the tool-kit of teachers to meet the needs of students with varying kinds and degrees of educational needs. This will involve a critical examination of classroom structures for participation that have traditionally been made available to students with disabilities as well as the exploration of alternate ones that can facilitate the learning and development of a diverse student body.

C\&T 5081. Collaborative communication in cultural contexts (3)
Inclusive Education Faculty. This course is designed for students taking the Inclusive Elementary Disability Studies Core, as well as for students in the CUED program with a Disability Studies Concentration. This course will explore, from a disability studies perspective, strategies for developing effective communication and interpersonal interaction skills appropriate for both collaborative and consultative relationships in schools. Focus will be on the development of these skills in interactions with both school professionals and family members of students. Particular attention will be paid to the development of these skills in ways that are responsive and relevant to diverse students.

C\&T 5112. Issues in child care and
education: Infancy through school age (2-3)
Faculty. An examination of such issues as inclusion, equity, effects of welfare reform, training
needs, and the role of transdisciplinary supports within the context of recent demographic, social, political, and economic changes in our society. Public and private sector responses to newly emerging issues, the dilemmas posed, and recommended solutions. Evaluations of the adequacy of the responses to the demand for child care, and the nature, characteristic, and quality of the supply. Invited speakers present perspectives from education, health and mental health, government, business, the community, advocacy, and communication.

C\&T 5114. Development of multicultural curriculum for the early years (2-3)
Faculty. Exploration of dynamics of curriculum development for young children from three through eight years of age. Participants will design a curriculum using principles of curriculum construction and a multicultural, inclusive philosophy. Prerequisite: C\&T 4114 or equivalent.

## C\&T 5118. Infant and toddler development

 and practice (2-4)Professor Recchia. Permission required.
Theory is related to practice and research with infants, toddlers, and families. Students participate in classroom practice and meet for weekly seminar on-site at the Rita Gold Early Childhood Center. Enrollment is for one or two semesters.

## C\&T 5302. Advanced practicum-

 giftedness (1-6)Professor Borland and Dr. Wright. Permission required. Guided experiences for advanced students in Giftedness. Supervised group field visits. Initial internships arranged. Students submit reports analyzing experiences.

## C\&T 5308. Advanced practicum-

 infancy and early childhood (1-6) Professors Genishi, Recchia and faculty. Permission required. Students engage in action research at their practicum sites.C\&T 5321. Practicum in early childhood education: Curriculum development, observation, and assessment in early childhood (3-4)
Faculty. Permission required. Supervised professional field experiences in early childhood settings. Emphasis on emerging issues and refinement of practice.

C\&T 5323. Supervision and the organization of programs for families with young children (3)
Faculty. Prerequisites: C\&T 5118. Assessment procedures, supervision, and social policy are related to the development and administration of programs for families with infants and toddlers.

C\&T 5502. Introduction to qualitative research in curriculum and teaching (2-3) Professors Genishi, Knight, and Siegel. Introductory seminar on methods in qualita-
tive research, with focus on case studies in classrooms and schools.

C\&T 5513-C\&T 5514. Seminar in early childhood education (3)
Professors Genishi and Recchia. Required of all second-year doctoral students in early childhood education and early childhood special education and open to other post-master's students with permission. Examination of underlying issues and currents in early childhood education, with formulation of initial research plans.

C\&T 5515. Infancy research seminar (1-6) Professor Recchia. Permission required. Research in infant development is facilitated and coordinated through exploration of a variety of research methods within a seminar format.

## C\&T 5800. Institute: Teaching of writing

 ( 1,3 , or 6 )Professor Calkins. The focus of the institute will be on the teaching of writing with the participants also working on their own writing. There will be a combination of large group presentations, small interactive sessions, and writing workshops. Separate sections will be offered for advanced participants. A partial list of topics to be covered includes: the central role of planning and curriculum development in the teaching of writing, methods for holding our students accountable for doing their best work, classroom structures that support inquiry and collaboration, and using literature to help students craft their writing. The Institute is appropriate for elementary and secondary teachers.

## C\&T 5902. Independent study-

giftedness (1-4)
Professor Borland. Permission required. Qualified students work under guidance on practical research problems. Proposed work must be outlined prior to registration; final written report required.

## C\&T 5905. Seminar in disability studies

 in education (2-4)Professor Broderick. Permission required. Students work in small groups under guidance on practical problems related to teacher-asscholar practitioner, teacher-as-classroom researcher, and teacher-as-change agent. Emphasis on ethical practices for diverse learners. Special fee: $\$ 25$.

C\&T 5908. Independent studyinfancy and early childhood (1-4) Professor Recchia and faculty. Permission required. Qualified students work under guidance on practical research problems. Proposed work on research problems must be outlined prior to registration; final written report required.

C\&T 6200. Field study in designing curriculum and instruction (1-3)
Faculty. Permission required. Field experiences in relation to designing, conducting, and evaluating programs in curriculum and instruction.

C\&T 6259-C\&T 6260. Fieldwork in preservice teacher education (1-4)

C\&T 6400. Internship program in curriculum research (1-6)
Faculty. Permission required. Firsthand experience in a center where curriculum research is in progress.

## C\&T 6405. Advanced internship-

 learning disabilities (1-6)Faculty. Permission required. Postmaster's level. Intensive professional internship designed to meet individual student's needs. Students submit reports analyzing experiences.

C\&T 6408. Advanced internshipinfancy and early childhood (1-6) Professors Kagan and Recchia. Permission required. Post-master's level. Intensive professional internship at agency chosen to meet individual student's needs. Students submit reports analyzing experiences.

C\&T 6452-C\&T 6453. Internship program in supervision and curriculum improvement (2-4)
Faculty. Permission required. Prerequisite: C\&T 4160 or C\&T 4051. Work with curriculum leaders in an ongoing program. Fieldwork involves school system problems and leadership processes.

- C\&T 6452. Professional (2-4)
- C\&T 6453. Initial (2-4)

C\&T 6501-C\&T 6502. Studies in curriculum and teaching (2-3)
Faculty. Permission required. Integrating seminar provides an opportunity for students to discuss issues and questions fundamental to the field of curriculum and teaching.

C\&T 6503. Seminar in field research (1-3) Faculty. Permission required. Corequisite: C\&T 6200-C\&T 6201. Collect and organize data and report field study findings. Abstract generalizations or limited theories as guides to practice and further research.

## C\&T 6506. Advanced seminar-

 giftedness (2-3)Professor Borland. For doctoral students in Giftedness. Recent developments in theory and research in gifted education.

C\&T 6507. Advanced seminar in disability studies (3)
Professor Broderick. For doctoral students in learning disabilities and related fields. Recent developments in theory and research as related to learning disabilities from psychological, educational, sociological, and other sources.

C\&T 6508. Advanced seminar-
infancy and early childhood (3)
Professors Genishi and Recchia. For doctoral students in early childhood, early childhood special education, and related fields. Recent developments in theory and research as related to current issues in the field.

C\&T 6532. Seminar in reading/language arts and related research (3) Professors Calkins and Siegel. Permission required. Open only to advanced master's and doctoral students with a specialization in literacy or a related area who have completed recent methods courses in literacy. In-depth study and discussion of trends and issues in literacy development and instruction.

C\&T 6533. Advanced study of children's literature (3)
Professor Calkins and faculty. Permission required. Issues and problems relating to the formulation of knowledge about children's literature.

C\&T 6551. Seminar in supervision and curriculum improvement (3)
Faculty. Permission required. Prerequisite: C\&T 4051, C\&T 4005, or equivalent. Primarily for doctoral students. Intensive study of selected problems. Major emphasis on formulation of supervision strategies and curriculum change.

C\&T 6569. Seminar in theory and research in curriculum (1-3)
Faculty. Permission required. Critical study of classroom environment as a laboratory for teacher education.

C\&T 6900. Directed research and theory development in curriculum and teaching (1-8)
Faculty. Permission required.
C\&T 6914-C\&T 6915. Advanced studies in early childhood and childhood education (1-4)
Professors Genishi, Kagan, and Recchia. Permission required. Identification and theoretical and empirical investigation of selected topics, problems, and issues in early childhood and childhood education. Topics vary. May be taken more than once for credit.

## C\&T 7500. Dissertation seminar in

 curriculum and teaching (3)Professors Genishi, Knight, Recchia and Zumwalt. Two semesters required of all doctoral candidates in the department unless proposal is defended in the first semester. Development of doctoral dissertations and presentation of proposals for approval.

C\&T 8900. Dissertation advisement in curriculum and teaching ( 0 )
Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current
tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D. degree.

## Continuing Education

C\&T 4802. Models of curriculum and teaching (non-credit or 1) Professor Goodwin or Genishi. An institute focusing on current issues in curriculum and teaching, such as innovative models of teaching or curriculum development in specific settings. Topics vary and institute may be taken more than once for credit.

C\&T 4822. Instructional models in the education of gifted students (non-credit, 1 or 2) Professor Borland. What should gifted students learn? How can we differentiate the curriculum for gifted learners in order to meet their special needs more effectively? These and other questions will be addressed in this threeday workshop devoted to the discussion, analysis, and evaluation of instructional models designed or adapted for gifted students. Emphasis will be placed on the principles of curricular differentiation and on providing an overview of a range of models designed to modify content, enhance the development of thinking skills, and enhance creativity.

C\&T 4835. Improving reading instruction (non-credit or 1)
Professor Siegel. An institute focusing on current issues in reading and related areas. Includes oral and written language development and children's literature.

C\&T 4858. Institute: Teaching of reading (3)

Professor Calkins. Designed to help teachers of grades K-8 develop a theoretical framework for the teaching of reading and a repertoire of strategies of enhancing students' independence and skills as readers.

C\&T 5810. Differential instruction for gifted students (non-credit, 1 or 2) Professor Borland and Dr. Wright. This threeday workshop provides participants with the opportunity to learn about and discuss new challenges and approaches to identifying and educating gifted students. Presentations and discussions will provide the core for each day. Small group work and individual consultations will also be integrated throughout the three days. The emphasis of these sessions will be on the creation of practical products and practices that can be used in the participants' schools. Schools are also encouraged to send both individuals and teams with clearly articulated issues and problems they would like to have discussed. Students enrolled for 2 credits will attend additional seminars to be scheduled during the class.

# Education Policy and Social Analysis 

## PROGRAMS:

ECONOMICS ANDEDUCATION102LEADERSHIP, POLICY, AND POLITICS ..... 104
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## DEPARTMENTAL MISSION:

The mission of The Department of Education Policy and Social Analysis is to engage in cutting edge research and teaching to address critical problems affecting education and contribute to informed analysis and action to promote educational achievement and equity.

EPSA starts out with a broad and inclusive view of the kinds of issues that its faculty and students might consider important to address. Explicitly, we are interested in both formal institutions of schooling and the political, bureaucratic, organizational, economic and social factors that profoundly affect both schools and the broader educational enterprise. We are interested in the role that families, communities, and civil society can play in promoting education outside the school building walls. We have a special interest and capability in addressing issues from preK through higher education, in identifying ways in which laws and institutions affect education, and in understanding the growing role of private for-profit and nonprofit organizations in delivering education technologies and services.

Students in this department will develop general skills of policy research and analysis, along with general perspectives on policy development and implementation that are widely applicable to other domains of public policy.

While education is distinct in some ways, many of the ideas and forces that affect it operate across a range of domestic policies. We attend to ways in which education differs from other public services and ways in which education policy may learn from experiences in other policy domains such as health policy. Social analysis grounded in disciplinary studies in sociology, political science, and economics should inform applied policy studies and vice versa.

## FACULTY:

## PROFESSORS:

Thomas Bailey
(Economics and Education)
Jeffrey R. Henig
(Politics and Education)
Jay P. Heubert
(Law and Education)
Sharon Lynn Kagan
(Early Childhood Education/
Education Policy)
Henry Levin
(Economics and Education)
Aaron M. Pallas
(Sociology and Education)
Craig Richards
(Education Leadership/
Education Policy)
Francisco Rivera-Batiz
(Economics and Education)
Mun Tsang
(Economics and Education)
Amy Stuart Wells
(Sociology and Education)

## PROFESSOR OF PRACTICE:

Michael Rebell
(Law and Education)

## ADJUNCT PROFESSORS:

Peter W. Cookson, Jr.
(Sociology and Education)
Joydeep Roy
(Economics and Education)

## ASSOCIATE PROFESSORS:

Kevin Dougherty
(Education Policy/Higher and
Postsecondary Education/
Sociology and Education)
Luis Huerta
(Education Policy/Sociology
and Education)
Carolyn Riehl
(Education Policy/Sociology
and Education)

## ADJUNCT ASSOCIATE PROFESSORS:

Janet Alperstein
(Sociology and Education)
Catherine Guerriero
(Politics and Education)
Fiona Hollands (Education Policy/
Sociology and Education)
Elana Sigall (Law and Education)

## ASSISTANT PROFESSORS:

Douglas Ready
(Education Policy/Sociology and Education)
Judith Scott-Clayton
(Economics and Education)

## INSTRUCTORS:

Terrenda White
(Sociology and Education)
David Wright
(Politics and Education)

For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit us at www.tc.edu/faculty.

## ECONOMICS AND EDUCATION

Program Coordinator:
Professor Francisco Rivera-Batiz
$\begin{array}{ll}\text { Program Office: } & \text { (212) 687-3152 } \\ \text { Email: } & \text { flr9@columbia.edu }\end{array}$
Website: www.tc.edu/epsa/Economics

## Degrees Offered:

ECONOMICS AND EDUCATION (ECON)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Philosophy (Ph.D.)
(Education Policy option available for degree levels above)

## Program Description:

Economics is a powerful tool for scholars and educational practitioners who wish to develop a better understanding of educational institutions and decisions. The program in Economics and Education at Teachers College was one of the first of its kind and has maintained its position of leadership in this rapidly growing field.

Graduates hold teaching positions in university and college faculties, and administrative or research positions in a variety of settings, including foundations, government departments, and international agencies. Increasingly, schools and universities are appointing economists with a special appreciation of educational goals and procedures to conduct institutional research. Some have gone into private business.

Students in the program develop an array of skills in the application of economic concepts and theory, in benefit-cost analysis and other evaluative procedures, and in the statistical treatment of mass data. Within broad college and university guidelines, students may pursue individually designed programs that satisfy their unique interests and career objectives.

With the help of an academic advisor, students select courses from those offered within the program of economics and education and supplement these with courses outside the department, including courses offered in other schools of Columbia University.

## Master of Arts

The objective of the 32-point Program in Economics and Education is to equip educational professionals and policy-makers with the skills required for the effective design and
implementation of educational policy. The program has a strong emphasis on the financial, managerial, and developmental challenges facing educational institutions in developing countries and economies in transition.

The program can be completed within one year and is highly focused to accommodate the demands of promising professionals and policymakers. The course of study is designed to convey the lessons of educational research and practice as well as management science through the intensive study of actual educational policy successes and failures. The curriculum of the program assumes that students possess some measure of intellectual maturity and exposure to the problems of educational policy-making.

The program begins in September and concludes in August of the following year. It consists of two semesters and a summer session.

The curriculum of the program aims to:

- build students' technical competence in the basic tools of educational management and policy making;
- provide the academic and professional environment for students to apply these skills; and
- educate students about the global educational landscape, including current thinking on educational reform and the financing of education.

In order to achieve these goals, the program begins in September with an intensive twosemester session in which students are taught skills that are essential building blocks for their career development. The program is skills-oriented and students will be asked to take courses in three topics: economic analysis and research skills, statistical tools for policymakers, and management skills for educational policy. In addition to these three topics, students, in collaboration with their faculty advisor, will design their own programs of study in five areas of concentration:

## Economic and Financial Policy Analysis

 in Education:This concentration covers the fundamentals of cost-benefit analysis in education, fiscal accountability, and the principles and practice of financial educational policy.

## Human Capital and Labor Markets:

The various impacts of human capital on labor market outcomes are studied in this concentration. Methods of estimating rates of return to education are examined, and case studies on the demand for education are presented.

Education and Economic Development: Current trends and challenges facing international educational development are discussed in this concentration. It offers a cross-national, comparative analysis of school finance and the role of education on economic development.

## Privatization and the Governance

## of Educational Systems:

This concentration provides a comprehensive discussion of alternative governance systems in education and their impact on student achievement and other educational outcomes. Decentralization, school choice, and vouchers are discussed, among others.

## Economics and Finance of Higher Education:

This concentration focuses on the analysis of higher education institutions and the financing of tertiary education, including coverage of cost recovery in higher education institutions, community colleges, financial aid, and equity issues.

A limited number of scholarships are available through the Joint Japan/World Bank Graduate Scholarship Program. For information about the program, call the Program Coordinator.

A student may also pursue a Master of Arts program in Economics and Education, without a concentration in Educational Policy. The student will design that program under the guidance of the academic advisor.

## Master of Education

This 60 -point program is intended for individuals interested in the applications and practices in the economics of education. The program is flexible and is designed by the student, under the guidance of the academic advisor.

## Doctor of Philosophy

This 75 -point program is intended for individuals who want to acquire advanced training in the theory, methods, and practices in the economics of education. It is a selective program to prepare individuals for leadership roles in teaching, research, or administrative settings.

The coursework for this program consists of three parts: core courses, courses in research methods, and courses in a specialized area of study. The available specialized areas include: education and economic development, education and transition to work, economics of higher education, educational finance, economic evaluation and cost analysis in education, economics of urban and minority education, economics of educational technology, teachers labor markets, and others.

## Special Application <br> Requirements/Information:

The GRE General Test is required for the Ph.D. program. A strong background in economics is also required. The Ph.D. program prefers applicants with a solid background in mathematics.

Applications are reviewed on an ongoing basis, and will be reviewed throughout the year. Preference in scholarship awards will be for those applicants who meet the early application deadline.

## COURSES:

EDPE 4050. Economics of education (3) Professors Bailey, Levin and Tsang. Teaches the basic economic concepts and methods to be used for further study and analysis of educational finance, education and inequality, education, and economic growth, the impact of educational policies on education; and outcomes, school reform, and school choice.

EDPE 4051. Education and economic development (3)
Professor Rivera-Batiz. This course examines the links between education and various aspects of economic development. Topics include the impact of human capital accumulation on economic growth, the educational attainment of men and women in developing countries, the effects of schooling on labor force participation, wages and fertilities, and the issues of school finance and educational policy in the Third World.

## EDPE 4055. Resource allocation in education (3)

Professor Levin. This course reviews the literature on school effectiveness with respect to the allocation of resources. It addresses and analyzes education production functions and cost-effectiveness analysis in educational deci-sion-making.

EDPE 4057. Economics of urban and minority education (3)
Professor Rivera-Batiz. Policy-oriented approach to the connections between education and the economy in an urban context. Topics include urban industrial restructuring and socioeconomic trends, equity in school finance, teacher salaries, public versus private roles in education, linkages between schools and the business sector, the economics of discrimination, and immigration policy issues.

EDPE 4058. Economics of higher education (3)

Professor Bailey. This course uses theoretical and empirical economic analysis to analyze the behavior of higher education students and institutions and to study private and public policy related to post-secondary education.

EDPE 4097. International and comparative studies in educational finance (3) Professor Tsang. Educational finance in international settings. Financing role of international development agencies. International and comparative studies in educational finance.

EDPE 4155. Evaluating educational
privatization and school choice (3)
Professor Levin. This course addresses the increasing emphasis on market-type choice systems including educational vouchers, forprofit educational firms, and charter schools. It places great emphasis on the theory of emerging empirical evidence underlying these developments in education.

EDPE 5550. Workshop in economics and education (1-3)
Professors Bailey, Levin, Rivera-Batiz and Tsang. For doctoral students and others with research projects or potential research projects in the field. Participation required for doctoral students writing their dissertation. Students who are beginning to think about their dissertation topic or working on proposals are also encouraged to participate. Faculty members may also be invited from within or outside the department to present their work.

EDPE 5650. Readings in the economics of education (3)
Faculty. Selected readings in the economics of education. Recommended for students with background in economics or a related discipline. As the selection of readings differs in different semesters, a student may register for more than one semester of ITSF 5650.

EDPE 6000. Advanced analysis in economics of education (3)
Professor Levin. The course focuses on the evaluation of state-of-the art research papers in the economics of education. The purpose is to provide critical readings and reviews of articles and papers across many different methods.

## EDPE 6023. Quantitative methods for causal inference (3)

Professor Scott-Clayton. This doctoral course covers the design, implementation, and interpretation of econometric methods used for evaluating causal relationships in education research, reading and discussing applied methodological texts as well as journal articles using advanced causal methods. The course covers randomized experiments, natural experiments, differences-in-differences, instrumental variables, regression discontinuity, and propensity score matching.

## EDPE 6050. Education and economic

 development: Advanced topics (3) Professor Rivera-Batiz. This course provides an advanced discussion of the links between education and economic development, including both theoretical frameworks and empirical models.EDPE 6052. Labor economics (3)
Professor Scott-Clayton. This course covers important concepts in labor economics, with a focus on how those concepts can be applied and tested in practice. The course will provide an overview of labor market topics such as the returns to education and training, non-monetary forms of compensation, models of labor migration, and models of imperfect or asymmetric information about skills. For each topic, we will examine influential papers and the empirical methods they use. The course is intended for doctoral students and will count towards the Labor Economics requirement for the Economics of Education Ph.D. program.

EDPE 6151. Advanced microeconomics with applications to education (3) Professor Rivera-Batiz. A doctoral-level survey of microeconomic theory with applications of relevance to the economics of education. Includes the theory of the firm and its implications regarding factor demands, educational production functions, and the demand for education. Consumer theory and the theory of labor supply. Human capital externalities. Intertemporal decision-making. Public finance and local public goods.
(For out-of-department courses, please check the appropriate department for course descriptions.)

- HUDM 5122. Applied regression analysis (3)
- ORLA 5020. Information systems for decision making in learning organizations (3)
- ORLH 4031. Financial administration of higher education institutions (3)

See also in the Columbia University Bulletin: Econ G6215, Macroeconomic analysis; Econ G6211-G6212, Microeconomic analysis; Econ G6411-G6412, Introduction to econometrics; Econ G6451-G6452, Economics of labor and population; Econ W4228, The urban economy; Econ W4328, Economic development; Econ W4410, Mathematical methods for economists; Econ W4460, Health economics.

## LEADERSHIP, POLICY AND POLITICS

Program Coordinators:
Professor Douglas Ready
Professor Luis Huerta

| Program Office: | (212) 678-3751 |
| :--- | :--- |
| Email: | kolb@tc.edu |
| Website: | www.tc.edu/epsa/lpp |

## Degrees Offered:

LEADERSHIP, POLICY AND POLITICS (ELPL)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## Program Description:

The course of study in Leadership, Policy, and Politics prepares students for such positions as policy analyst, policy advocate, and educational researcher. It develops students' skills in the political, economic, and legal analysis of education policy issues, while focusing on the role of leadership. Students are required to explore one policy topic in depth as part of a field experience. Coursework includes a research methods sequence suitable to the requirements of education policy professionals and experience writing policy briefs for a variety of audiences. Doctoral students complete the master's-level core courses, a two-part advancement to candidacy process, and a research dissertation. Coursework beyond the core is chosen individually in conjunction with a faculty advisor. Students in the Leadership, Policy, and Politics concentration may take coursework leading to the M.A., Ed.M., or Ed.D., and to the Ph.D. in Education Leadership. Most coursework is offered during the school year. Contact Professor Luis Huerta at lah2013@columbia.edu or Professor Doug Ready at ready@tc.edu. For individual degree program planners and special applications go to www.tc.edu/epsa/LPP.
M.A. in Education Leadership with a course of study in Leadership, Policy, and Politics (ELPL)
This 33-point degree is intended for educators and non-educators considering entry level positions in education policy or management who do not want building-level certification. The policy and politics concentration requires a sequence of courses including introduction to economic, political, and legal policy perspectives, education leadership, and a research methods sequence. Students also complete a policy analysis project. Degree requirements may be completed in one year of intensive study or on a part-time basis.

Ed.M. in Education Leadership with a course of study in Leadership, Policy, and Politics (ELPL)
The 60 -point degree is intended for educators and non-educators seeking careers in education policy in either the private or the public sector. The program of study builds on the required M.A. course sequence with additional work in a policy area relevant to the student's interests. Up to 30 points of eligible coursework from another graduate institution or program may be applied to the Ed.M. degree.

Ed.D. in Education Leadership with a course of study in Leadership, Policy, and Politics
(ELPL) (not accepting applications for 2012-2013)
The 90 -point degree in Leadership, Policy and Politics, intended for aspiring experts in the political, economic, or legal analysis of educational issues, emphasizing the practice of education leadership as policy analysts, researchers, or advisors. The program anticipates strong commitments to education from applicants, and prepares candidates to excel in the integration of theory and practice. It requires the completion of the Leadership, Policy, and Politics master's degree core curriculum, a substantial methodological strand, and a two-part (theory and practice) advancement to candidacy process before students may begin a research dissertation. Applicants experienced in the practice of education are expected to focus on developing their skills in policy analysis, while those with policyrelated experience are expected to develop a solid understanding of the unique ways that schools function and are governed. Up to 40 points of acceptable credit may be transferred from another graduate institution with an advisor's approval, and required coursework may be completed on a full- or part-time basis.

For the Ph.D. in Education Leadership with a concentration in Leadership, Policy and Politics, see the description listed in the Department of Organization and Leadership.

## NON-DEGREE PROGRAMS

In addition to the degree programs previously described, the Department of Education Policy and Social Analysis offers several professional development opportunities to both first-time students and to alumni interested in continuing their graduate education. These are listed below.

## School Law Institute

For over 20 years, this five-day program has offered public- and charter-school educators (administrators, teachers, guidance counselors, etc.), policy analysts, policymakers, union reps, advocates and others the tools they need to address important current issues of law, policy,
research, and practice. Available for 3 graduate credits or on a non-credit basis, nationally eminent faculty members use lectures, discussions and simulations to explore such issues as charter schools, fiscal equity and educational adequacy; safety and order (harassment, child abuse, tort liability, search and seizure, and cyber-bullying); race, poverty, and education; NCLB and Race to the Top; the rights and needs of students with disabilities and Englishlanguage learners; and promoting diversity in education after Parents Involved. For more information, visit www.tc.edu/schoollaw or contact Professor Jay Heubert at heubert@tc.edu.

## Concurrent Programs in Education and Law

The Education Policy and Social Analysis Department and Columbia Law School offer courses that prepare students for positions that require knowledge and expertise in education law. There are at present no formal jointdegree programs between Teachers College and Columbia Law School, but students admitted to both schools may be eligible (through ad hoc arrangements) to pursue education and law degrees concurrently. For information, contact Professor Jay Heubert at (212) 678-3775.

## COURSES:

Before selecting courses, students should consult: (1) the Degree Requirements of the College describing the requirements of each degree; (2) the requirements of the Leadership, Policy, and Politics Program as described in the Program Study Guide at www.tc.edu/epsa, and (3) their faculty advisors.

EDPA 4002. Data analysis for policy and decision making I (3)
Professor Ready. This is an introductory course in quantitative research methods that focus on non-experimental designs and the analysis of large-scale longitudinal datasets, especially those related to education policy. Students become familiar with the logic of inferential statistics and the application of basic analytic techniques. No prior knowledge of statistics or quantitative methods is required.

EDPA 4013. Education policy and the management of instruction (3)
Professor Riehl. This course explores current ideas about desirable goals for student learning and development in K-12 education and will use a backward-mapping approach to consider how curriculum and instruction; classroom and school environments; organizational strategies; leadership practices; and local, state, and federal education policies can facilitate progress towards those goals. The course is intended to help students develop and articulate ambitious theories of action for school improvement and the management of instruction that can be
useful in their work as education policy makers or analysts, academic researchers, and practitioners.

EDPA 4025. Higher education policy (3) Professor Dougherty. An introduction to the higher education policy making process. Main topics: the general nature of policy making with examples and readings from higher education; key actors, institutional structures and processes in the federal, state, and local higher education policy arenas; and the origins and consequences of key policy enactments affecting college access and success, instruction, performance accountability, and the economic development role of higher education.

EDPA 4042. The role of the state in education governance, policy, and practice (3) Faculty. The impact of state authority on local schools and school districts, seen through case studies of contemporary educational issues. Roles, relationships, trends, and the political context of policy making at the state level.

EDPA 4046. School finance: Policy and practice (3)
Professor Richards. Examination of the judicial and legislative involvement in school finance reform, taxation, and the equity and efficiency of local, state, and federal finance policies and systems.

EDPA 4047. Politics and public policy (3) Faculty. What are the relative roles of research and politics in determining public policy? One tradition considers public policy from the perspective of rational decision-making and considers research to be a source of objective enlightenment. A second tradition considers public policy as the outcome of battles among organized interests and portrays research as a weapon exploited by the powerful to further their own ends. This course addresses these and other issues as they relate to each of the stages in the policy process and as manifested in contemporary education policy debates such as that around school choice.

## EDPA 4048. Education policy analysis and implementation (3)

Professor Huerta. Explores the issues of policy (or reform) implementation in schools and districts by focusing on the political reactions and organizational buffers to policy change and the ways that policies become adapted and changed to fit locally defined problems. Distinctions between implementation issues in bottom-up and top-down policy change are explored.

EDPA 4086. Law and education:
Regulation, religion, free speech, and safety (3)

Professors Heubert and Sigall. This survey course focuses on legal issues that arise in public and private schools. Topics include governmental regulation of public and private
schools; church-state issues (prayer, vouchers, evolution); free-speech rights of students, teachers, and extracurricular groups; who controls the curriculum; the school's authority to make and enforce rules governing student and staff conduct on and off school grounds; the duty to protect the safety of students and others; child abuse; search and seizure; and due process. The course draws on the multidisciplinary perspectives of law, policy, research, and educational practice.

EDPA 4899. Federal Policy Institute (3)
Professor Kagan. The Federal Policy Institute (FPI) is designed to give students a first-hand opportunity to meet with key policy leaders around the most crucial, contemporary policy issues. Key themes will include the enduring values of American education and how they shape current policy; current issues in national educational reform; and the role of the federal government in shaping educational policy.

EDPA 4900. Research and independent study in education policy (1-8)
Faculty. For students wishing to pursue independent study and/or research on topics not covered in regular courses. Requires faculty member's approval of a study plan, reading list, and final paper or other products or projects. Permission required from individual faculty.

## EDPA 5002. Data analysis for policy and decision making II (3)

Professor Ready. This is an intermediate-level course in non-experimental quantitative research methods, especially those related to education policy. The class examines such topics as factor analysis, modeling non-linear relationships and interactions using regression, analyses of change, logistic and multinomial logistic regression, missing data analyses, and fixed effects models. Prerequisite: students should have completed at least one graduatelevel course in applied statistics or data analysis (e.g., ORLA 4002).

## EDPA 5016. Educational equality:

## The role of law (3)

Professors Heubert and Sigall. Historically, many barriers to educational equality - and many important efforts to overcome such barriers - have involved the law. This course examines major efforts to use law to attack discrimination and to ensure high-quality education for all children. Topics include: addressing racial segregation and concentrated poverty; the standards movement and high-stakes testing; the right to an adequate education; sex and gender discrimination; harassment; services for English-language learners; special education; and affirmative action. The course draws on the multidisciplinary perspectives of law, policy, research, and educational practice.

EDPA 5086. Education policy making and the courts (3)
Professor Rebell. Beginning with the school desegregation decrees issued by the federal courts in the wake of Brown v. Board of Education, the federal and state courts have been called upon to consider a range of asserted educational rights and to oversee far-reaching institutional reforms that bear little relationship to traditional judicial remedies. This course will examine the legal and political justifications for the courts' role in making educational policy and reforming public institutions, as well as the courts' capacity to undertake these functions. The course will give particular attention to school desegregation and special education cases in the federal courts and education adequacy litigations in the state courts, including the recent decisions of the New York State Court of Appeals in CFE v. State of New York.

EDPA 5515. Master's seminar in leadership, policy, and politics (3)
Professor Huerta. This seminar is designed to give students the opportunity to demonstrate a theoretical and analytical understanding of the practical problems inherent in conducting policy research for education clients. Policy analysis requires its practitioners to evaluate available information, to weigh the possible impacts of alternative policies; to understand political, legal, and/or economic ramifications; and to produce plans for action that are organizationally feasible and publicly valuable.

EDPA 5541. Federal politics, federal policies, and administrators (3)
Faculty. The course will begin with a theoretical discussion of the meaning of "equal educational opportunity" from a variety of philosophical, economic, educational, and political perspectives. We will then review the egalitarian concepts reflected in Congressional statutes, administrative regulations, and court decrees in such areas as school desegregation, bilingual education, and special education and the extent to which these legal mandates have, in practice, advanced educational opportunity.

EDPA 5880B. School Law Institute (3)
Professors Heubert, Rebell, and a national faculty. Explore important, timely issues of education law, including issues of race and poverty in education; serving English-language learners; the legal rights of students with disabilities; the right to an adequate education; and issues of safety and order (harassment, child abuse, tort liability, search and seizure, and cyber-bullying). For more information, see page 200, visithttp://www.tc.edu/schoollaw, and/or contact Professor Jay Heubert at heubert@tc.edu.

EDPA 6013. Early childhood development and education: Integrating research and policy perspectives (3)
Professor Kagan. First section of a two-semester course with students participating in both semesters. Focuses on diverse perspectives
framing the field and in so doing will present the most critical issues that require policy attention. Building on this background, the second semester will address steps that have been taken to ameliorate these issues, focusing heavily on research. By design, then, the first semester will present an array of issues and perspectives in order to provide the conceptual foundation for an exploration of salient strategies to address them in the second semester. By looking at early childhood development and learning from this stance, students will not only be exposed to diverse ideas about the content but will also be armed to address pressing challenges the field faces with them all in mind. (The second semester course is HUDK 6013, taught by Professor Jeanne Brooks-Gunn, is in the Department of Human Development.)

## EDPA 6027 International perspectives

 on early childhood policy (3) Professor Kagan. Looks at early childhood education policy through an international lens, addressing often neglected but highly salient policy questions, including the following: What have been the real effects of the Millennium Development Goals and the Education for All goals on education systems in general, and on early childhood education in particular? How have poverty, gender, and the needs of marginalized populations/cultures shaped early childhood policy in diverse countries? What are the unique policy properties that must be considered when developing policies for young children and their families? To what extent do the policy contexts of nations differ and how do these differences impact early childhood policies directly? To what extent can lessons learned in one context be faithfully transported across national boundaries?
## EDPA 6030. Institutional theory:

Sociological perspectives on institutional change in education (3)
Professor Huerta. An introduction to organizational theory as it applies to a variety of institutions with particular attention to the potential of educational activities as a force in formal organizations.

EDPA 6542. Social and political history of American education reform (3-4)
Faculty. Over the past century, educators have experienced wave after wave of reforms intended to address the latest education "crisis." This perpetual cycle of school improvement stems in part from the competing and often contradictory demands placed upon public education. In response, school improvement efforts have alternated between a focus on equity and excellence, progressive and traditional pedagogical approaches, centralized and decentralized governance, and private rights versus public needs. Students in this course will explore the social and political roots of these pendulum swings and examine the historical forces that fuel America's desire
for continual school reform. Issues of race, religion, class, and language-which are intimately tied to these tensions-are woven into the readings, discussions, and coursework. Permission of the instructor is required.

EDPA 6641. Advanced topics in research methods and design (1-4)
Faculty. This course provides students the opportunity to explore advanced topics in research design and analytic methods, especially as they relate to studies of educational contexts and policies.

EDPA 6900. Directed research and study in education policy (1-8)
Faculty. For students wishing to pursue independent study or original research as they prepare for their doctoral certification examination and/or dissertation proposal. Permission required from individual faculty.

## EDPA 7500. Dissertation seminar in education policy (3)

Faculty. This course provides students the opportunity to discuss topics related to the preparation of their dissertation proposal in a seminar format. Students present their ideas and writing for feedback from the instructor and other students. Students may enroll in this seminar once. Permission of the instructor is required.

## EDPA 7501. Dissertation research seminar

 (3)Faculty. This course provides students the opportunity to discuss their dissertation proposal in a seminar format, with support and feedback from the instructor and other students. Students are eligible to enroll in this seminar after enrolling in ORLA 7500 and before their dissertation proposal has been approved. Students may enroll in this course once. Permission of the instructor is required.

## EDPA 8900. Dissertation advisement in education policy (0)

Faculty. Individual advisement on the doctoral dissertation. Students register for this in the first semester after their dissertation proposal has been approved and continue registering in this (or in another course, with sponsor approval) until the dissertation is completed. Requires ongoing consultation between the student and dissertation sponsor. The fee equals three points at the current tuition rate for each term. Permission required from individual faculty.

## POLITICS AND EDUCATION

Program Coordinator:
Professor Jeffrey Henig
Program Office: (212) 678-3751
Email: kolb@tc.edu
Website: www.tc.edu/epsa/Politics

## Degrees Offered:

POLITICS AND EDUCATION (POLC)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## Program Description:

The Politics and Education program serves students who wish to study the ways in which governance institutions, political ideologies, and competing interests (both within and outside of the education community) influence the content, form, and functioning of schooling. Schools represent a powerful instrument for shaping the development of future generations of citizens and workers as well as an important source of jobs and investment in many communities. How do societies handle conflicting visions of what schools should and should not be doing, and what are the specific changes in political and governance processes that might facilitate better decision-making and policy implementation? Students will study in depth the ways power and politics affect and are affected by such issues as reform and innovation, centralization and decentralization within federal systems of governance, privatization and school choice, race and ethnicity, poverty and inequality, professionalization and bureaucratization, testing and accountability.

Faculty contributing to the program are drawn from throughout the College and possess research and teaching interests in urban, suburban, state, and federal levels of school governance, as well as in cross-national and other comparative settings. The balance of control and cooperation, coalition building and competition, resistance and bargaining in each of these settings, as well as the central roles of power and agency in the political science discipline, inform the perspectives of faculty and students in this program.

In addition to courses listed within the Politics and Education program, the Department of Education Policy and Social Analysis, Teachers College and the Departments of Political Science and School of International and Public Affairs at Columbia University are all resources available to students as they develop their pro-
grams of study. Depending on their interests, students with a master's degree in Politics and Education conduct research in think-tanks and education policy shops, teach politics, history or civics in secondary school, or hold public office or other leadership positions in educational settings as diverse as private and public schools, corporations, citizen groups, and foundations. Doctoral recipients in Politics and Education teach in colleges and universities, conduct research in think-tanks and research centers, and advise public officials. Ph.D. students are expected to master the discipline of political science in addition to the specialty of politics in education.

## Special Application Requirements/Information:

All applicants are required to submit GRE General Test scores. Doctoral applications must include three letters of reference, which focus on academic skills and potential. Doctoral applications received after the early deadline as advertised by the College will be considered for admission, but not scholarship aid, on a space-available basis. Master's applications that are complete and have been received by the Admissions Office by the early deadline will be considered for both admission and any available scholarship aid. All complete applications received by the final deadline for the master's program will be considered for admission only.

## Degree Requirements:

For further information on specific program requirements consult the program website at www.tc.edu/epsa/Politics.

Newly admitted students are asked to participate in a set of core political science and general foundation courses in education. Each student will also complete methodological requirements including but not limited to statistics, qualitative, and quantitative methods. After completing the core, each student is expected to focus his or her studies on a set of political debates in education or a particular political arena.

Master of Arts (M.A., 32 points)
and Master of Education (Ed.M., 60 POINTS) students follow a core program of coursework and other learning experiences developed by the Politics faculty and individually adjusted in consultation with an assigned advisor. Up to 30 points of transfer credit are accepted towards an Ed.M. but only upon approval of an assigned faculty advisor after the student is admitted. Under College policy, no transfer credits are accepted for M.A. students.

Ed.D. DOCTORAL (90 POINTS) students complete a core of coursework at a level of sophistication commensurate with doctoral study. They also must meet the program requirements for advancement to candidacy and complete a research dissertation.

Ph.D. (75 POINTS) students also demonstrate command of two research tools, selected from the following list: (1) a reading knowledge of a foreign language, (2) a reading knowledge of a second foreign language, (3) an approved two-course sequence in quantitative analysis, (4) an approved two-course sequence in formal modeling, or (5) a comparable level of proficiency in a comparable research tool approved by the College. Ph.D. students may be required to take as many as 12 points of coursework at Columbia University in the Political Science Department.

## COURSES:

Politics and Education students take courses in a number of related programs and departments. These courses, on such topics as law and education, economics and education, and political policy analysis are listed elsewhere. Further information on these courses can be found on the program website www.tc.edu/ epsa/Politics/.

Courses specifically linked to the program include:

## EDPP 4040. American politics

and education (3)
Faculty. Introduction to the basic analytical categories of political science as they apply to the politics of education, including the influence of federal, state, and local governments in school policy-making, decentralization, school finance, and desegregation.

## EDPP 4042. Comparative politics

and education (3)
Faculty. The politics of education in settings outside the U.S. Topics include the role of education in political development, political socialization, and student politics.

## EDPP 4043. Political thought

and education (3)
Faculty. Study of the educational imperatives inherent in the classics of Western political thought.

## Intermediate

## EDPP 5041. Politics of centralization

 and decentralization (3)Professor Henig. Analyzes the political underpinnings and consequences of centralization versus decentralization at various levels of governance with special but not exclusive attention to educational decision-making.

EDPP 5042. Urban politics and
education (3)
Professor Henig. Politics in the nation's largest cities with a particular focus on educational politics and policy.

## EDPP 5044. Modern political theory

 and education (3)Faculty. Explores a number of educational policy issues from the perspective of contemporary political theory.

EDPP 5045. Race, ethnicity, and U.S. educational policy (3)

Faculty. Examination of the impact of race and ethnicity on the formation and implementation of policies such as desegregation, affirmative action, bilingual education, and choice.

## EDPP 5046. Education and politics

in Western thought (3)
Faculty. Study in historical perspective of the interactions between technological innovation and education.

## Advanced

## EDPP 5640. Colloquium on the politics

 of education (3)Faculty. Continuous participation required of doctoral students until their dissertation proposals are accepted. A critical review of important works in politics and education, discussions with invited guests, presentations of work in progress.

EDPP 5642. Colloquium in political economy and education (3)
Faculty. Political and economic perspectives on contemporary problems of public policy and education.

EDPP 6540. Seminar in politics of education (3)
Faculty/staff. Permission required. Selected topics in the politics of education.

## Individualized Studies

EDPP 6900. Research and independent study (1-3)
Faculty/staff. Permission required.
EDPP 6940. Studies in politics and education (1-6)
Faculty.
EDPP 7503. Dissertation seminar (1-3)
Faculty. Permission required. Development of doctoral dissertation proposals.

EDPP 8900. Dissertation advisement (0)
Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

## SOCIOLOGY AND EDUCATION

Program Coordinator:
Professor Aaron M. Pallas
Program Office: (212) 678-3165
Email: amp155@columbia.edu
Website: www.tc.edu/epsa/Sociology

## Degrees Offered:

SOCIOLOGY AND EDUCATION (SOCL)
Master of Arts (M.A.)*
Master of Education (Ed.M.)*
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)
*Policy Studies in Sociology concentration available

## Program Description:

The sociological study of education began at Teachers College in the first decade of the twentieth century. Sociology was established as the first social science discipline providing a basic framework for the study of education, complementing the long-established reliance on psychology. Over this period, the Sociology and Education Program has applied research findings to education and has examined basic issues in education from a sociological perspective. Although the program's theory and research have emphasized schools and colleges, attention also has been given to education in other contexts.

The faculty for Sociology and Education includes sociologists from other programs at the College and the Department of Sociology of the Graduate School of Arts and Sciences. Faculty strengths are in education and social stratification; the social organization and design of schools, classrooms, and other learning environments; urban education; school desegregation and school choice; education and the life course; and the social analysis of education policy. The program provides training and hands-on experience in evaluation methods and both quantitative and qualitative research methods.

The curriculum of the Sociology and Education program emphasizes issues in urban education, including the social organization of urban schools and school systems, and the success or failure of urban schools in meeting the educational needs of the diverse populations they serve. The program faculty are actively engaged in the analysis and evaluation of educational policies and programs designed to serve educationally disadvantaged populations.

The program in Sociology and Education also offers a Policy Studies Concentration for students in the M.A. and Ed.M. programs. For more information on this concentration, which is open to students throughout Teachers College, please contact Professor Aaron Pallas.

## Degree Programs

The graduate program in Sociology and Education offers four degree programs: the M.A., the Ed.M., the Ed.D., and the Ph.D. Each program is designed to meet the needs of students with a particular combination of prior experience and career objectives. The M.A., Ed.M., and Ed.D. programs may be completed on a part-time basis with classes offered in the evening hours. The Ph.D. program requires full-time study. Although students from all of the degree programs in sociology and education are prepared to assume positions in educational institutions, the program does not offer teacher certification. Certification programs are available in other departments at Teachers College.

## Master of Arts

The Master of Arts program in sociology and education (with a policy concentration option) provides an introduction to the application of sociological perspectives to contemporary educational policy issues. The program provides coverage of the core principles and methods of sociology as they are applied to policy research and analysis. Students completing this program are prepared to assume positions as general analysts in a variety of organizations devoted to applied educational research, policy making, advocacy, consulting, and direct educational service.

## Master of Education

The Master of Education in sociology and education (with a policy concentration option) is an advanced master's degree pursued by students who already possess a master's degree in a substantive area of education or by students without a prior master's degree who want an opportunity to combine study in sociology and education with another area in education. The program involves study of sociological perspectives and methods in the context of contemporary educational policy issues. Current substantive areas that can be combined with study in sociology and policy include evaluation and institutional analysis, human development, technology, curriculum, administration, and foundations. Students completing this program are prepared to assume positions as specialists in a variety of organizations devoted to applied educational research, policy making, advocacy, consulting, and management of educational activities.

## Doctor of Philosophy

The Doctor of Philosophy in Education (Ph.D.) program is designed for students with substantial background and interest in the discipline of sociology and its application to education. The Ph.D. is a highly specialized degree with few electives and requires substantial coursework to be done in daytime classes at the Graduate School of Arts and Sciences at Columbia University. This program, therefore, requires full-time study. Students completing this program are prepared to assume positions in college and university programs focused on sociological research in the field of education.

## Doctor of Education

The Doctor of Education (Ed.D.) program is designed to provide broad training in the social sciences, education, and educational policy. The program prepares students for positions in teaching, research, and policy through interdisciplinary study grounded in the sociological perspective. All coursework is available at Teachers College, and both part-time and full-time study is possible. Students completing this program are prepared to assume positions in college and university programs in education as well as leadership positions in a variety of organizations devoted to applied educational research, policy making, advocacy, consulting, and management of educational activities.

## Special Application

## Requirements/Information:

The GRE General Test is required for all doctoral applicants, and doctoral applications are reviewed for fall term only.

## Degree Requirements:

Master of Arts-32 points
Sociology Core Courses (12 points)
from among the following:

- EDPS 4000 Education and public policy (3) (required for the policy option)
- HUDK 4011 Sociology of online learning (3)
- EDPS 4021 Sociology of education (3)
- EDPS 4022 Sociology of urban education (3)
- EDPS 4024 Social stratification and education (3)
- EDPS 4027 Sociology of classrooms (3)
- EDPS 4028 Sociology of the life course (3)
- EDPS 4029 Sociology of schools (3)
- HUDK 4031 Sociology of evaluation (3)
- EDPS 4032 Gender, difference, and curriculum (3)
- EDPS 5022 Sociological analysis of educational systems (3)
- HUDK 5621 Technology and society (3)
- EDPS 6525
- ITSF 5023
- ITSF 5026
- ITSF 5120
- ITSF 6520
- ORLA 4010

Seminar in sociology of education (3)
The family as educator (3)
The family and television (3)
Education in community settings: Museums (2-3)
Seminar in families and communities as educator (1-3)
Introduction of organizational change theory in education (3)

For the policy option only, the following courses may be taken:

- ITSF 5120 Education in community settings (3)
- EDPA 6030 Institutional theory: Sociological perspectives on institutional change in education (3)
Or other approved courses.
Research Methods (6 points):
- HUDM 4122 Probability and statistical inference (3)

And an approved course in qualitative methods, including one or more of the following:

- C\&T 5502 Introduction to qualitative research in curriculum and teaching (3)
- ITSF 5000 Methods of inquiry: Ethnography and participant observation (3)
- ITSF 5001 Ethnography and participant observation: Fieldwork, analysis, reporting (3)
- ITSF 5007 Race, class, and schooling: Ethnographic approaches (3)

Policy Sequence ( 6 points; or 9 points with policy option):

- EDPS $5645 \quad$ Policy seminar I (3), and
- EDPS $5646 \quad$ Policy seminar II (3)

For the policy option, both of the above courses plus an approved content-driven policy course. See the Teachers College Office of Policy and Research website for more information.

Colloquia (3 points):

- EDPS 4620 Introductory colloquium in sociology and education (2-3) or
- HUDK 5100 Supervised research and practice (1-6)

Electives (3-5 points; or 0-3 points with policy option):
Selected in consultation with an advisor.

## For the policy option:

- EDPA $4899 \quad \begin{aligned} & \text { Federal Policy Institute (3) } \\ & \text { (recommended) }\end{aligned}$

Culminating Experience (0-3 points):

- Master's comprehensive examination, or
- Master's essay and EDPS 6021, Social research methods: Reporting (1 point in fall; 2 points in spring)


## Master of Education-60 points Sociology Core Courses (12 points) from among the following:

- EDPS 4000 Education and public policy (3) (required for the policy option)
- HUDK 4011 Sociology of online learning (3)
- EDPS 4021 Sociology of education (3)
- EDPS 4022 Sociology of urban education (3)
- EDPS 4024 Social stratification
and education (3)
- EDPS 4027 Sociology of classrooms (3)
- EDPS 4028 Sociology of the life course (3)
- EDPS 4029 Sociology of schools (3)
- HUDK 4031 Sociology of evaluation (3)
- EDPS 4032 Gender, difference, and curriculum (3)
- EDPS 5022 Sociological analysis of
educational systems (3)
- HUDK 5621 Technology and society (3)
- EDPS 6525 Seminar in sociology of education (3)
- ITSF 5023 The family as educator (3)
- ITSF 5026 The family and television (3)
- ITSF 5120 Education in community settings: Museums (2-3)
- ITSF 6520 Seminar in families and communities as educator ( $1-3$ )
- ORLA 4010 Introduction of organizational change theory in education (3)

For the policy option only, the following courses may be taken:

- ITSF 5120
- EDPA 6030

> Education in community settings (3)
> Institutional theory:
> Sociological perspectives on institutional change in education (3)

## Research Methods (9 points):

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- An approved course in qualitative methods (3)


## Concentration (9 points):

Courses in Sociology of Education or an additional area of concentration, selected in consultation with an advisor.

For the policy option, the following Policy Sequence replaces the above concentration:

- EDPS $5645 \quad$ Policy seminar I (3), and
- EDPS 5646 Policy seminar II (3), and
- An approved content-driven policy course


## Electives (30 points):

Selected in consultation with an advisor from offerings at Teachers College or other schools of Columbia University.

## Culminating Experience (0-3 points):

- Master's comprehensive examination, or
- Master's essay and EDPS 6021, Social research methods: Reporting (1 point in fall; 2 points in spring)


## Breadth Requirement:

To satisfy College requirements, all students must complete a minimum of three Teachers College courses (a course for this purpose is one in which at least 2 points are earned) outside of EDPS.

## Doctor of Philosophy-75 points

The coursework for the Ph.D., which totals a minimum of 75 points, has seven components: social theory, basic social research design and methods, advanced social research design and methods, foundational coursework in sociology, core coursework in the sociology of education, seminars and colloquia, and elective courses. The required coursework is offered at Teachers College and in the Sociology Department in Columbia's Graduate School of Arts and Sciences. With advisor permission, students may pursue courses in other professional schools at the University or through the InterUniversity Doctoral Consortium. (Please refer to the Inter-University Doctoral Consortium section of this bulletin for participating schools.)

Social theory (6 points) includes coursework in classical and contemporary sociological theory.

Basic social research design and methods (12 points) involves coursework in research design, probability and statistics, applied regression analysis, and qualitative research methods. Courses in advanced social research design and methods (minimum 6 points) build on these basic courses in the quantitative and/or qualitative domains. Students also enroll in at least one 3-point course offered by the Graduate School of Arts and Sciences at Columbia or a Consortium institution in each of the areas of social stratification/inequality, social organization, and social change.

Ph.D. students also pursue a minimum of 12 points in core classes in the sociology of education and 6 points in seminars and colloquia designed to prepare students for dissertation research. The balance of the 75 -point minimum is earned through elective courses selected in collaboration with the student's advisor.

## Doctor of Education-90 points

The coursework for the Ed.D., which totals a minimum of 90 points, has seven components: basic social research design and methods, advanced social research design and methods, social theory, core coursework in the sociology of education, seminars and colloquia, coursework in the social context of teaching and learning, and elective courses. All of the required coursework is offered at Teachers College.

Basic social research design and methods (12 points) involves coursework in research design, probability and statistics, applied regression analysis, and qualitative research methods. Courses in advanced social research design and methods (minimum 6 points) build on these basic courses in the quantitative and/or qualitative domains. Social theory courses (3 points) draw from sociology and other social sciences. Ed.D. students also pursue a minimum of 15 points in core classes in the sociology of education and 6 points in seminars and colloquia designed to prepare students for dissertation research.

One of the hallmarks of the Ed.D. curriculum is a 9 -point concentration in the social context of teaching and learning, which draws on courses in Education Policy and Social Analysis, Curriculum and Teaching, and International and Transcultural Studies. All students take at least one course in Developmental Psychology and Cognitive Studies in Education. The balance of the 90 -point minimum is earned through elective courses selected in collaboration with the student's advisor.

Policy Studies in Sociology Concentration Option:

- EDPS 4000 Education and public policy (3)
- EDPS 5645 Policy seminar I (3)
- EDPS 5646 Policy seminar II (3)
- Approved content-driven policy course (3)


## COURSES:

EDPS 4000. Education and public policy (3) Professor Wells. Examination of the federal role in $\mathrm{k}-12$ educational policy over the course of the 20th century and its impact on states and districts.

EDPS 4021. Sociology of education (3)
Professor Pallas. A broad analysis of education using basic sociological concepts, including schools as organizations, socialization, stratification, and ethnic relations.

EDPS 4022. Sociology of urban education (3) Professor Wells. Analysis of urban schools and districts within the context of urban social and political systems.

## EDPS 4024. Social stratification and

 education (3)Faculty. An examination of the link between education and social inequality in Western societies, questioning whether schools are a mechanism of social mobility, enabling poor and disadvantaged children to get ahead in life, or whether schools perpetuate the hardships faced by poor and minority populations. Topics include the importance of quantity and quality of schooling for adult success; the ways in which race/ethnicity, sex, and social class background structure students' educational experiences; the role of tracking and ability grouping within schools; and the link between schooling and the economy.

EDPS 4027. Sociology of classrooms (3) Faculty/staff. An examination of sociological research on the structure and operation of classrooms. Particular attention to the processes of stratification, socialization, legitimation, and social organization.

EDPS 4028. Sociology of the life course (3)
Professor Pallas. Sociologists define the life course of individuals by when, and in what order, people assume key social roles, such as becoming an adult or moving from the workforce to retirement. This course looks at the sociology of the life course. Focusing on how historical and societal factors combine with the personal characteristics of individuals to produce unique life course patterns.

EDPS 4029. Sociology of schools (3)
Faculty/staff. An examination of sociological research on the structure and operation of schools. Particular attention to the processes of socialization, stratification, and legitimation as well as social organization and the sociology of school curriculum.

## EDPS 4030. Sociology of educational processes in formal organizations (3)

Faculty. An introduction to organizational theory as it applies to a variety of institutions with particular attention to the potential of educational activities as a force in formal organizations.

## EDPS 4032. Gender, difference,

 and curriculum (2-3)Dr. Alperstein. A study of the extent and causes of gender inequality in society and the ways in which schools work both to reduce and exacerbate inequality.

EDPS 4620. Introductory colloquium in sociology of education (2-3)
Professor Pallas. Permission required. Intensive readings and discussions of basic literature in sociology of education, with attention to common issues and research strategies.

EDPS 5020. Methods of social research: Survey methods (3)
Professor Pallas. Relationship between research problem and study design, choice of population, sampling methods, instrument construction, interviewing, data processing, and analysis.

EDPS 5022. Sociological analysis of educational systems (2-3)
Faculty. Analysis of local and national education systems through application and adaptation of organization theory, with special attention to problems of innovation.

EDPS 5430. Internship (1-6)
Faculty. Permission required. Supervised experience in diverse settings designed to develop skills in policy-related research, development, planning, and evaluation.

EDPS 5620. Advanced colloquium in sociology of education (1-3)
Professor Wells. This course is designed to enhance student knowledge of social theory in sociological research. Particular attention is devoted to deductive models of explanation and their use in the construction of theory and its application as a basis for empirical inquiry.

EDPS 5645. Policy seminar I (3)
Professor Pallas. Conceptualization and identification of social and educational problems that can be subjected to policy interventions. Design and evaluation of alternative policy choices. Effective strategies for presenting policy analysis to multiple audiences.

EDPS 5646. Policy seminar II (3) Professor Pallas. An introduction to the evaluation of social and educational programs. Topics include evaluation to inform program conceptualization and design; measuring program implementation; impact assessment, including randomized experiments; cost-effectiveness analysis; and the social and political context of program evaluation.

EDPS 6021. Social research methods: Reporting (1-2)
Faculty. Students wishing to complete a master's essay or thesis instead of taking the master's exam will design a study, collect and analyze data and write an extensive paper.

EDPS 6525. Seminar in sociology of education (1-3)
Faculty. A seminar for doctoral students to further their professional development and to prepare for doctoral research.

## Individualized Studies

EDPS 4903. Research and independent study (1-3)
Faculty. Permission required.
EDPS 6903. Research and independent study (1-9)
Faculty. Permission required.
EDPS 6920. Studies in sociology and education (1-8)

EDPS 7503. Dissertation seminar (0-3) Faculty. Permission required. Required of doctoral students in the semester following successful completion of certification examinations.

EDPS 8903. Dissertation advisement (0) Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Registration for Ed.D./Ph.D. degrees.

Advanced students may register for intensive individual study of some aspect of their specialization. Registration is only by permission of the instructor under whose guidance the work will be undertaken. Times for individual conferences will be arranged. Enrollment may be for 1 or more points each term, and registration is not limited to one or two terms.

# Health and Behavior Studies 

## PROGRAMS:

APPLIED EDUCATIONALPSYCHOLOGY115Reading SpecialistSchool Psychology
HEALTH STUDIES120Diabetes Educationand ManagementHealth EducationNursing Education
NUTRITION ..... 127Nutrition EducationNutrition and Public Health
Community Nutrition Education* Applied Physiology and NutritionBehavioral Nutrition
SPECIAL EDUCATION ..... 134
Applied Behavior Analysis
Deaf and Hard of HearingGuidance and RehabilitationInstructional Practice inSpecial Education
Intellectual Disability/Autism
Physical Disabilities
Severe or Multiple Disabilities
TEACHING OFAMERICAN SIGN LANGUAGEAS A FOREIGN LANGUAGE143

* Offered jointly with the Department ofBiobehavioral Sciences.



## DEPARTMENTAL MISSION:

## The mission of the Department of Health and Behavior Studies is

 to improve health, learning, and social well-being in schools and other settings and throughout the lifespan. This mission is achieved by:*Generating the applied research on the behavioral and social determinants of health and learning that provides the evidence base to inform the design, implementation, and evaluation of interventions in schools and other community settings that can improve health and mitigate learning and other disabilities.

* Preparing practitioners, scholars, and leaders who can help people to realize their full potential, make informed decisions, and attain the best possible quality of life.

Thus, the department is committed to the professional preparation of those who will serve diverse at-risk or high-needs populations by conducting socially consequential and policyrelevant research and fostering interdisciplinary collaboration in practice to address problems in society that no single disciplinary approach can achieve.

The programs in the Department fall into the following categories:

## Applied Educational Psychology

This area of study includes the following programs: Reading Specialist and School Psychology. Such study prepares students to serve as educators, scientists, and service providers in a variety of settings, including universities, schools, psychoeducational clinics, hospital-based child study clinics, and community agencies.

## Health Studies and Nutrition

These areas of study include the following programs: Diabetes Education and Management, Health Education, Nursing Education, and Nutrition (Applied Physiology and Nutrition, Community Nutrition Education, Nutrition and Public Health, Nutrition Education, and Behavioral Nutrition). Students in Nutrition may also complete a Dietetic Internship option accredited by the American Dietetic Association. These programs prepare students to serve in leadership roles in community-based organizations, government agencies, corporations, health care settings, fitness centers, sports organizations and educational settings. Current knowledge in behavioral science and education is integrated with field-based applications for health promotion and disease prevention.

## Special Education

Among the programs included in Special Education are Applied Behavior Analysis, Deaf and Hard of Hearing, Guidance and Rehabilitation, Instructional Practice, Intellectual Disability/ Autism, Physical Disabilities, and Severe or Multiple Disabilities. These programs prepare students to serve as leaders and scholar-practitioners skilled in the development, evaluation, and application of practices that improve the life prospects of people with disabilities.

Teaching of American Sign Language (ASL) as a Foreign Language
Teaching American Sign Language (ASL) as a Foreign Language prepares students to serve as scholar-practitioners who are skilled, knowledgeable, and practiced in the development, evaluation, and implementation of pedagogy that will instruct and educate individuals unfamiliar with ASL, the deaf community, and the culture of individuals who are deaf or hard of hearing. Typically, the population that these scholar-practitioners will eventually instruct and educate are individuals who themselves have hearing, are in regular education programs, and possess a wide range of cultural backgrounds and cognitive, social, and academic abilities.

The Department faculty offers a broad spectrum of expertise. We encourage multidisciplinary efforts within the faculty and hope that in the course of their studies, students will acquire the valuable skill of working collaboratively with experts in other disciplines.

## FACULTY:

## PROFESSORS:

John P. Allegrante (Health Education)
Charles E. Basch (Health Education)
Marla R. Brassard (School Psychology)
Isobel R. Contento (Nutrition)
R. Douglas Greer
(General and Special Education:
Applied Behavior Analysis)
Linda Hickson
(Special Education:
Intellectual Disability/Autism)
Kathleen A. O'Connell
(Nursing Education)
Dolores Perin (Reading Specialist)
Stephen T. Peverly (School Psychology)
Philip A. Saigh (School Psychology)
Barbara C. Wallace (Health Education)

## ADJUNCT PROFESSORS:

Ann E. Boehm (School Psychology)
Robert E. Fullilove, III (Health Education)
Joan Gussow (Nutrition)
Ray Marks (Health Education)
John T. Pinto (Nutrition)

## ASSOCIATE PROFESSORS:

Robert E. Kretschmer
(Special Education: Deaf and Hard of Hearing) Randi Wolf (Nutrition)

## VISITING ASSOCIATE PROFESSORS:

C. Ronald MacKenzie (Health Education)

Elizabeth A. Walker (Health Education)

## ADJUNCT ASSOCIATE PROFESSORS:

Caroline Camuñas (Nursing Education)
Jane K. Dickinson (Diabetes Education and Management)
Maria Dolores Cox (Special Education)
Pamela Koch (Nutrition)
Noelle Regina Leonard (School Psychology)
Susan Lipkowitz (Special Education)
Toni Liquori (Nutrition)
Araxi Pasagian Macaulay
(Health Education)
Jose Eduardo Nanin (Health Education)
Christine E. Pawelski (Special Education)
Margaret G.E. Peterson
(Health Education)
Lesley Rennis (Health Education)
Karen Reznik Dolins (Nutrition)
Katherine Roberts (Health Education)

## ASSISTANT PROFESSORS:

Hsu-Min Chiang (Special Education) Jessica Singer Dudek
(General and Special Education)
Melissa Scollan-Koliopoulos (Diabetes
Education and Management)

## LECTURERS:

Gardith Marcelin (School Psychology) Jennifer Mascolo (School Psychology)
Susan Garni Masullo (Reading Specialist)
Russell Rosen (Special Education:
ASL as a Foreign Language)
Emily Shamash (Special Education)
Lora A. Sporny (Nutrition)

ADJUNCT ASSISTANT PROFESSORS:
Ara Bahadourian (Special Education) Evan Berk (Nutrition) Bonnie Bernstein (Nutrition) Suhong Chen (School Psychology)
Jeanne Coleman (Health Education) Jo Ann Delgado (Special Education) Grant Gautreaux (Special Education) Miriam Goldstein (Reading Specialist) Michelle Greenwald (School Psychology) Susan Hall (School Psychology) Margot Hodes (Health Education) Jennifer Hope (School Psychology) L.P. Johnson (Health Education) Richard Keller (Special Education) William Kernan (Health Education) Ishita Khemka (Special Education: Intellectual Disability/Autism) Maya Korin (Health Education) Michael Koski (School Psychology) Erin Rivelis (School Psychology) Dimitra Robokos (Reading Specialist) James Sumowski (School Psychology) Rebecca Urciuoli (Reading Specialist) Mary Margaret Whelley (School Psychology) Elizabeth Zachry (Reading Specialist)

## INSTRUCTORS

Toby Amidor (Nutrition)
Young Seh Bae (Special Education)
David Cohen (Special Education:
Blindness and Visual Impairment)
Christina Costa (Nutrition)
Mary Anne Gray (Reading Specialist)
Leah Greenberg (Special Education)
Ann-Maria Gropp (Reading Specialist)
Maria Hartman (Special Education)
Kate MacKenzie (Nutrition)
Tara Malka (Special Education)
Sarah Mallory (Special Education)
Shelley Mesznik (Nutrition)
Giani Pedulla (Special Education:
Blindness and Visual Impairment)
Mary Ellen Rooney (Special Education:
Intellectual Disability/Autism)
Michelle Saunders (Special Education:
Blindness and Visual Impairment)
Lynn Settlow (Reading Specialist)
Michelle Veyvoda (Special Education)

## RESEARCH PROFESSOR

Inga Dora Sigfusdottir (Health Education)

For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit us at www.tc.edu/faculty.

## Applied Educational Psychology

The Applied Educational Psychology area of study includes the following programs: Reading Specialist and School Psychology.

## READING <br> SPECIALIST

Program Coordinator:
Professor Dolores Perin
Program Office: (212) 678-3942
Email: perin@tc.edu
Website: www.tc.columbia.edu/hbs/ ReadingSpecialist/

## Degree Offered:

READING SPECIALIST-
InITIAL CERTIFICATION (READ-INIT)
Master of Arts (M.A.)

## Program Description:

The Reading Specialist M.A. program provides students with a broad foundation in applied educational psychology as it relates to literacy acquisition and concentrated preparation in assessment and intervention in reading and writing difficulties. The program provides experience in working with child, adolescent, and adult learners.

Key program characteristics are:

- Preparation for two New York State certifications: Teacher of Literacy, Birth-6 and Teacher of Literacy, 5-12.
- Preparation to work with children, adolescents, and adults with reading and writing difficulties.
- Individualized and small group focus: Students are prepared to teach reading and writing to struggling readers both individually and in small groups. This prepares them to provide literacy instruction in pull-out programs, inclusion classrooms, and regular classrooms.
- Balanced literacy focus: Integration of rigorous, evidence-based phonics training with authentic literacy-encompassing word recognition, reading comprehension, fluency , vocabulary development, spelling, and expressive writing.
- Assessment and intervention focus: Students learn to deploy a battery of class-room-based and standardized assessment measures to identify strengths and weaknesses of individual students and groups and then to develop an intervention plan based on the assessment findings.
- Preparation to diagnose dyslexia: Students learn to administer a battery of standardized tests and formulate a diagnosis.
- Psychology focus: Understanding of typically developing and delayed literacy development from the vantage point of cognitive processes and their relation to race, ethnicity, language proficiency, and socio-economic status.
- Research focus: Emphasis on evidence-based (scientifically based) intervention strategies for struggling readers.
- Lifespan perspective: Students learn to deliver assessment and intervention to individuals from preschool emergent literacy through adolescence and adulthood. Students learn to develop content-area literacy interventions. Adults include adult literacy students and college dyslexics. It is never too late to improve literacy skills.
- Clinical experience: Students take practica in a clinic at Teachers College where they deliver services to struggling readers of all ages, who come from lowincome households.
- School experience: One practicum may be taken at the student's own school or another selected school.
- Professional development focus: Preparation for professional development in advanced seminar as well as in graduate assistantship.
- Full-time students (four courses in each academic semester and summer courses) can complete the program in one calendar year.


## Special Application <br> Requirements/Information:

Students who apply to the Program must possess an undergraduate degree in a field relevant to literacy. Applicants are reviewed based on their undergraduate and any other academic performance, a personal statement, and at least two references. Students who wish to be recommended by TC for New York State Literacy Teacher certification upon completion of the M.A. requirements must enter the program with prior certification in a regular education area. Applicants who do not have this certification are asked to contact Professor Dolores Perin (dp111@columbia.edu). Information about New York State certification is also available from the Office of Teacher Education (ote@tc.edu).

## Degree Requirements:

## Master of Arts

The Master of Arts consists of 34 points (minimum 12 courses: 10 required, 2 elective) and can be pursued either part-time or full-time. Completion of a Master's Integrative Project is required for graduation.

Required Courses (10 required courses, total 28-30 points):

- HBSK 4072 Theory and techniques of reading assessment and intervention (3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)
- HBSK 4077 Adult basic literacy (3) or
- HBSK 5099 Writing interventions theory and practice (3)
(Choose HBSK 5099 or 4077)
- HBSK 5098 Diagnosis of reading and writing disabilities (HBSK 4072 prerequisite) (3)
- HBSK $5373 \quad$ Practicum in literacy assessment and intervention I (HBSK 4072 prerequisite or corequisite) (3)
- HBSK 5376 Practicum in literacy assessment and intervention II (HBSK 4072 and HBSK 5373 prerequisite) (3)
- HBSK $5377 \quad$ Practicum in literacy assessment and intervention III (HBSK 5376 prerequisite) (3)
- HBSK $5580 \quad$ Seminar in consultation and evaluation in reading (to be taken during the final spring of the program) (3)
Psychology of language and
- HUDK $5090 \begin{aligned} & \text { Psychology of language and } \\ & \text { reading (2-3) or }\end{aligned}$
- HUDK 4022 Developmental psychology: Childhood (2-3) or
- HUDK 4023 Developmental psychology: Adolescence (2-3)
- A\&HT 5000 Advanced topics in

TESOL (2-3) or

- A\&HL 4106 Text and textuality (3) or
- A\&HT 4185 Pedagogical approaches in the content areas for teachers of K-12 ESL (3) or
- BBSN 4199 Issues: Neuroscience in education (2-3)


## Elective Courses

( 2 or 3 courses, total 6 points):
See FAQ available at www.tc.edu/hbs/ReadingSpecialist

Course grades
Courses must be taken for a letter grade, not pass/fail.

## Completion of M.A. Project

The Master's Integrative Project addresses areas related to literacy and related learning difficulties among children, adolescents, and adults. This culminating project is conducted under the supervision of an advisor.

COURSES:
See courses in Reading Specialist and School Psychology programs.

## SCHOOL PSYCHOLOGY

Program Coordinators:
Professor Marla Brassard (Ph.D.)
Professor Philip Saigh (Ed.M.)
Program Office: (212) 678-3942
Email: Brassard@tc.edu
Email: $\quad$ Saigh@tc.edu
Website: www.tc.edu/hbs/SchoolPsych

## Degrees Offered:

APPLIED DEVELOPMENTAL AND LEARNING PSYCHOLOGY- school psychology (SPSM)
Master of Education (Ed.M.)

## SCHOOL PSYCHOLOGY (SPSD)

Doctor of Philosophy (Ph.D.)*

## Program Description:

Both our master's and doctoral programs are fully approved by the National Association of School Psychologists (NASP). Our Ph.D. program is also fully approved by the American Psychological Association (APA). These programs focus on the application of cognitive and developmental psychology to the promotion of competence in learning and mental health in schools and other educational contexts. Coursework provides students with a strong foundation in the theory and research of cognitive and developmental psychology and its application to: (a) the instruction and learning of school-related subjects, particularly reading and (b) the understanding and treatment of mental health problems. Practica and internship experiences provide students with the opportunity to apply this knowledge directly to their work with clients.

Clients are seen in a variety of contexts, including our collaborating schools (we provide school psychological services to children and youth in several schools that serve children from racially, ethnically, and linguistically diverse low, and middle income environments). Faculty research, all of which is cognitively and/or developmentally oriented, provides yet another vehicle for students (doctoral primarily) to develop and apply their knowledge.

The overall goal of the program is to educate school psychologists who can promote the cognitive, behavioral, and social growth and development of children and families from diverse linguistic, cultural or racial backgrounds.
*In addition to the Ph.D., the program in School Psychology also has a New York State Department of Education registered Ed.D. option. However, that degree is not accredited by the American Psycho-
logical Association (APA), and the program has not accepted applications or admitted students to the Ed.D. program in many years.

## Program Goals:

Goal 1: Have a sound theoretical foundation in cognitive and developmental psychology; access and diagnose learning, behavior, and social-emotional problems and strengths; and plan, implement, and evaluate effectiveness of psychological and educational prevention and intervention programs that promote cognitive, behavioral, and social-emotional growth of children and families.

Goal 2: Effectively participate in their community by promoting cognitive, behavioral, and social-emotional, and educational growth of children and families.

Goal 3: Understand and respect individual differences and differences in culture, race/ ethnicity, gender, socioeconomic status, and sexual orientation and work effectively in multicultural and pluralistic social contexts.

Goal 4: Have a breadth of knowledge and variety of skills to plan and conduct psychological and educational research and evaluation programs.

Goal 5: Be actively involved in the profession and committed to professional ethics and standards and to life-long learning.

## Special Application

## Instructions/Information:

The GRE General Test and an academic writing sample (a paper from an undergraduate or prior graduate class) are required for applicants to the Ed.M. and Ph.D. degrees.

## Degree Requirements:

## Master of Education

Our National Association of School Psychologists (NASP)-approved Master of Education program requires 69 points of coursework. The course of study stresses a firm grounding in the core areas of psychology, especially cognitive psychology, as well as in the tools traditionally used by school psychologists to apply their knowledge and skills to school settings. Completion of the Ed.M. program in School Psychology can lead to certification as a school psychologist in New York State.

Ed.M. students should plan on three years of full-time attendance, including summers. Although part-time attendance is possible, full-time attendance leads to a richer educational experience. Ed.M. students must be
available to spend a minimum of one full day per week for practica in their first year and two full days per week for fieldwork in their second year. Internships are full-time.

Suggested sequence of courses by year and semester:

First Year:
Fall

- HBSK 4025 Professional and ethical functions of school psychologists
- HBSK 4072 Theory and techniques of reading assessment and intervention
- HBSK 4073 Childhood disorders, or
- HBSK 5031 Family as a context for child development
- HBSK 5320 Individual psychological
- HBSK 5378 testing I
- HBSK 5378 Practicum in psychoeducational assessment of school subject difficulties

Spring

- HBSK 4073 Childhood disorders, or
- HBSK 5031 Family as a context for child development
- HBSK 5321 Individual psychological testing II
- HBSK 6380 Practicum in psychoeducational assessment with culturally diverse students
- HBSS 6100 Measurement and program evaluation
- Course on multicultural school psychology


## Summer

- ORL 5362
- HBSK 6584

Second Year:
Fall

- HBSK 5085* Observing and assessing preschool children
- HBSK 5050 Therapeutic interventions
- HBSK 5070
and cognitive development
- HBSK 5280
- HBSK 6382 Advanced practicum in

Spring

- CCPJ 6362
-HBSK 4074*
- HBSK 5051
- HBSK 5280

Group dynamics:
A systems perspective
Seminar: School psychology consultation Therapeutic interventions Neural bases for language Fieldwork in school psychological services psychoeducational interventions in schools

Group practicum Development of reading comprehension strategies and study skills Child-adolescent PTSD and related disorders Fieldwork in school psychological services

- HBSK 6383

Summer

- HBSK 5096
- HUDM 4122

Third Year:

- HBSK 5480

Neuropsychological assessment of children and adults

- HUDM 5122
- ORL 5362

Summer

- HUDM 5123
- HBSK 6584

School psychologist internship (full-time placement)

## Second Year:

Fall
*Take HBSK 5085 if you are interested in working with young children; take HBSK 4074 if you are interested in late elementary/middle school and high school populations.

## Doctoral Program

Our American Psychological Association (APA) - and National Association of School Psychologists (NASP) - approved doctoral program (Ph.D.) requires a minimum of 90 points. Students may have to complete courses in addition to those included in the curriculum if their advisor deems it necessary (e.g., an extra statistics course). Attainment of the doctoral degree prepares students for certification as a school psychologist and licensure as a psychologist. On average, doctoral students should plan on five years of full-time attendance, including summers. This includes three years of coursework, a two-semester externship in the third year, a full-year internship during the fifth year, and a dissertation.

Suggested sequence of courses by year and semester:

First Year:
Fall

- HBSK 4025

Professional and ethical functions of school psychologists

- HBSK 4072 Theory and techniques of reading assessment and intervention
- HBSK 5320 Individual psychological
- HBSK 5378 Practicum in psychoPracticum in psycho-
educational assessment of school subject difficulties*
- HBSK 6570HBSK 6578
- HUDM 4122

Spring

- HBSK 4073
- HBSK 5321
- HBSK 6380 Practicum in psycho-
- HBSK 6570 HBSK 6578

Research in applied educational psychology Probability and statistical inference

Childhood disorders* Individual psychological testing II* educational assessment with culturally diverse students educational psychology*

Applied regression analysis Group dynamics: A systems perspective

Linear models and experimental design Seminar: School psychology consultation.

- HBSK 5050
- HBSK 5070
- HBSK 5280
- HBSK 6382
- HBSK 6570-

HBSK 6578

- ORLJ 5040

Spring

- CCPJ 6362
- HBSK 503

Group practicum Family as a context for child development

- HBSK 5280 psychological services
- HBSK 6383 Neuropsychological assessment of children and adults*
- HBSK 6570- Research in applied HBSK 6578 educational psychology
- Course on multicultural school psychology

Summer

- CCPX 6020

History and systems of psychology, or

- HBSK 5096 The psychology of memory
- HUDM 5059 Psychological measurement

Third Year:
Fall

- HBSK 5085 Observing and assessing preschool children
- HBSK 5271 Supervised externship in psychoeducational practice
- HBSK 6570- Research in applied

HBSK 6578 educational psychology

- ORLJ 5540 Proseminar in social and organizational psychology

Spring

- HBSK 4074
- HBSK 5051
- HBSK 5271
- HBSK 5273
- HBSK 6570-

HBSK 6578

Development of reading comprehension strategies and study skills
Child-adolescent PTSD and related disorders Supervised externship in psychoeducational practice Supervised experience in supervision
Research in applied educational psychology*

Summer

- CCPX 6020

History and systems of psychology, or The psychology of memory

Fourth Year:
Fall

- HBSK 7503
- HBSK 5271

Spring

- HBSK 8902
- HBSK 5271

Dissertation seminar: Schooling and reading** Supervised externship in psychoeducational practice

Dissertation advisement: Schooling and reading Supervised externship in psychoeducational practice

Fifth Year:

- HBSK 6480

School psychologist internship

- HBSK 8902 Dissertation advisement: Schooling and reading
* Includes a lab that is not part of the scheduled time for the course. Lab times are usually decided on a group by group basis once lab supervisors are assigned (HBSK 5321 is an exception with a scheduled lab).
** If the student has a proposal hearing after one semester of HBSK 7503, she must enroll in HBSK 8900. HBSK 7503 cannot be taken more than twice.

There are many opportunities for fieldwork and internship experiences in the New York City area including public schools, residential schools, and hospitals.

## COURSES:

(Reading Specialist and School Psychology programs)

HBSK 4025. Professional and ethical functions of school psychologists (3) Professor Peverly. Permission required. Overview of issues associated with the school psychologist's roles within educational settings including assessment, intervention, and consultation. Education and disability law and ethics are stressed.

HBSK 4072. Theory and techniques of reading assessment and intervention (3) Professor Perin and Dr. Masullo. Overview of theories, assessment, and intervention techniques for reading and writing across the lifespan. Both typical development and literacy difficulty are addressed. Materials fee: $\$ 50$.

HBSK 4073. Childhood disorders (3)
Professor Saigh. Permission required. Information involving the symptoms, life-course, prevalence, and etiology of a number of psychiatric disorders that are manifested in childhood and adolescence is presented. Information involving assessment and treatment is also considered. This course considers psycho-edu-
cational assessment, diagnosis, and treatment of child and adolescent disorders. A testing lab is included. Materials fee: $\$ 75$.

HBSK 4074. Development of reading comprehension strategies and study skills (3) Professor Peverly. Reading and study skills: Practical procedures based on research findings appropriate for teachers, counselors, and others. Discussion focuses on students in the middle elementary grades through young adulthood.

## HBSK 4077. Adult basic literacy (3)

Professor Perin. An examination of the learning of reading and writing by adults who have not achieved full literacy. Populations discussed include adults with learning disabilities, adult basic education students, community college continuing education and developmental education students, immigrants and others who have limited English language proficiency, students in correctional settings, and participants in adult literacy programs outside of the U.S.

HBSK 4903. Research-independent study in reading (1-3)
Faculty. Permission required. Individualized research and fieldwork projects in literacy assessment and intervention.

HBSK 5031. Family as a context for child development (3)
Professor Brassard. Prerequisite: Any introductory developmental psychology course. Examines theories of family functioning and empirical evidence of family processes that mediate child and adolescent development outcomes. Emphasis on family factors associated with children's cognitive, emotional, and academic development, including home-school collaboration and social functioning within cultural contexts. Materials fee: $\$ 10$.

HBSK 5050. Therapeutic interventions for school psychologists (3)
Professor Saigh. Permission required. This course is intended to provide school psychology students with information about applied behavior analysis, behavior therapy, and cognitivebehavior therapy. Information pertaining to behavioral assessment, single-case research designs and behavioral and cognitive-behavioral approaches to the treatment of childhood disorders and problems is considered. Information involving treatment efficacy is a major focus of the course. Materials fee: $\$ 100$

## HBSK 5051. Child-adolescent PTSD

 and related disorders (3)Professor Saigh. Permission required. This course presents information about the history, epidemiology, etiology, assessment, prevention, and cog-nitive-behavioral treatment of child-adolescent post-traumatic stress disorder (PTSD) and related internalizing disorders. Analogue diagnostic and treatment training is provided. Materials fee: $\$ 100$.

HBSK 5070. Neural bases for language and cognitive development (3)
Dr. Sumowski. Permission required. Examination of neural mechanisms involved in language, reading, and the acquisition of academic skills. Particular attention is paid to language disorders, variations in cerebral organization, and hemisphere specialization.

## HBSK 5085. Observing and assessing

 preschool children (3)Professor Boehm. Overview of assessment procedures used with preschool and kindergartenage children including review of related tests, the development of observation procedures, and the development of screening programs. Materials fee: $\$ 75$.

HBSK 5096. The psychology of memory (3) Professor Peverly. An analysis of perspectives on human memory with particular attention to knowledge, attention, strategic processes, meta-cognition, transfer, and context. The application of this information to practice is stressed.

## HBSK 5098. Diagnosis of reading and

 writing disabilities (3)Faculty. Prerequisites: HBSK 4072. Presents theories and practices of diagnosing dyslexia and other disorders of literacy. Students learn to administer, score, and interpret a test battery and to formulate a diagnosis. Materials fee: $\$ 50$.

HBSK 5099. Writing interventions theory and practice (3)
Professor Perin. This is a literacy course that applies research on cognitive, linguistic, affective, social, and cultural processes underlying writing performance to the development of writing interventions. Writing is discussed within a larger context of reading comprehension and subject-matter knowledge. Students learn to evaluate and design content area writing interventions for both typically developing and spe-cial-needs populations of differing ages in various educational settings.

HBSK 5271-HBSK 5273. Supervised fieldwork in remedial reading and school difficulties
Faculty. Permission required.

- HBSK 5271. Supervised externship in psychoeducational practice (1-3) Dr. Hall. Supervised experience in a school, hospital, or community clinic focusing on psychoeducational assessment, counseling, remediation, and consultation. Prerequisite: HBSK 5280. Supervisory fee: $\$ 100$.
- HBSK 5272. Supervised field placement in reading (1-3) Professor Perin. Students conduct projects in a variety of field sites, including K-12 schools, community
colleges, and adult education programs, under faculty supervision. The field experience provides an opportunity to understand both practical and theoretical aspects of pressing questions concerning literacy acquisition across the lifespan.
- HBSK 5273. Supervised experience in supervision (1-2)
Professor Brassard. Advanced doctoral students are supervised in their supervision of the comprehensive psychoeducational assessments with clients in the Center for Educational and Psychological Services performed by first-year school psychology students enrolled in HBSK 6380.

HBSK 5280. Fieldwork in school psychological services (2)
Drs. Mascolo, Hope, Marcelin, and
Greenwald. Permission required. Limited to second-year students in School Psychology. Must be taken concurrently with HBSK 6382HBSK 6383. Supervised school-based experience in psychoeducational practice (two days per week for the entire academic year). Includes university-based supervision. Supervisory fee: $\$ 100$ per semester.

## HBSK 5320-HBSK 5321. Individual

 psychological testing (3)Professor Brassard. Permission required. This is a year-long course open to Ed.M. and doctoral students in School Psychology. Background, administration, and interpretation of major psychological tests from both nomothetic and ideographic perspectives. Both courses cover the administration of major cognitive and personality measures and the interpretation and integration of data into case reports. Lecture plus lab/supervisory section. Supervisory fee: $\$ 100$; materials fee: $\$ 50$ per term.

- HBSK 5320. Individual psychological testing I (3)
- HBSK 5321. Individual psychological testing II (3)


## HBSK 5373. Practicum in literacy assessment and intervention I (3)

Faculty. Prerequisite or corequisite: HBSK 4072 , grade of $B$ or better. This is the first of three practica that provide experience in the assessment and instruction of literacy skill including phonemic awareness, decoding, word recognition, vocabulary, fluency, spelling, expressive writing, and reading comprehension. Students receive clinical practice in administering, scoring, and interpreting a classroom testbased battery and providing an instructional intervention to a client with literacy difficulty. At this level, students work with children in early childhood and elementary education. All work is conducted in a clinical setting under the guidance of a supervisor and the course instructor. Besides assessment and intervention, students learn to conduct intake interviews and
client conferences, conceptualize individuals' learning patterns, interact with parents and other family members, follow ethical guidelines appropriate for the profession, prepare regular documentation, and write case reports to professional standard. Materials fee: $\$ 100$.

HBSK 5376. Practicum in literacy assessment and intervention II (3) Faculty. Prerequisite or corequisite: HBSK 4072, HBSK 5373, grade of B+ or better. Students work in a clinical setting to provide assessment and interventions within the context of a diagnostic teaching model for an individual with literacy difficulties. Clinical work is conducted under the guidance of a supervisor and the course instructor. Professional guidelines, practices, and writing continue to be emphasized. Materials fee: $\$ 100$.

HBSK 5377. Practicum in literacy assessment and intervention III (2-3) Dr. Masullo. Prerequisite: HBSK 5376, grade of B+ or better. Students gain literacy assessment and intervention experience working with small groups of learners in a schoolbased setting. The practicum focuses on the full developmental range from early childhood through adolescent and adult literacy, including content-area reading and writing. Students have opportunities to work with classroom teachers, literacy teachers, and other school personnel while continuing to adhere to professional ethical guidelines and standards in their assessment, teaching, and preparation of reports. Materials fee: $\$ 100$.

HBSK 5378. Practicum in psychoeducational assessment of school subject difficulties (3) Dr. Mascolo. Covers the assessment of academic skills, especially reading and cognitive functioning. The administration, scoring, and meaningful interpretation of test performance are addressed. Students work in pairs with client.

HBSK 5580. Seminar in consultation and evaluation in reading (3) Professor Perin and Dr. Masullo. Current topics in literacy and schooling; professional issues; evaluation of intervention programs and research; preparation for integrative project requirement.

HBSK 6320. Practicum in college instruction (1-3)
Faculty. Permission required. Supervised experience in preparation of instructional materials and in assessment of student performance at the college and university level.

HBSK 6380. Practicum in psychoeducational assessment with culturally diverse students (3)
Drs. Mascolo, Rivelis, and Hall. Permission required. Supervised experience in psychoeducational assessment, including observation, interviewing, and testing of children and youth from culturally diverse backgrounds; integration and interpretation of data. Consideration
of intervention procedures. Students work with clients in the Dean Hope Center. Additional supervisory session required. Supervisory fee: $\$ 100$. Materials fee: $\$ 50$.

HBSK 6382. Advanced practicum in psychoeducational interventions in schools (3)

Dr. Marcelin. Permission required. Concurrent registration in HBSK 5280 required for all School Psychology students. Cognitive-behavioral interventions with children, adolescents, and their families. Special fee: $\$ 150$.

HBSK 6383. Neuropsychological assessment of children and adults (3) Dr. Whelley. Permission required. Prerequisites: HBSK 5320 and either BBSN 5033 or BBSN 5070. Analysis, administration, and interpretation of special procedures used to assess brain damage/dysfunction in adults and children. Special fee: $\$ 150$.

HBSK 5480-HBSK 6480. School psychologist internship (0-3)
Dr. Hall. Permission required. Limited to Ed.M. or doctoral students in school psychology. Supervised experience in the delivery of psychological services in approved and appropriate agencies, institutions, and schools.

HBSK 6570-HBSK 6578. Research in applied educational psychology ( $0-3$ ) Faculty. Permission required. Prerequisite: familiarity with statistical procedures and research design. Students participate in ongoing research or other special projects under the direction of a faculty member.

- HBSK 6570. Neurosciences and education (0-3)
Dr. Salzinger.
- HBSK 6571. Cognitive processes and strategies in young children (0-3) Faculty.
- HBSK 6572. Post-traumatic stress disorder (0-3) Professor Saigh.
- HBSK 6573. Text comprehension (0-3) Faculty.
- HBSK 6574. Cognitive processes related to studying (0-3) Professor Peverly.
- HBSK 6575. Risk and resilience (0-3)
- HBSK 6576. Acquisition of reading and writing ability (0-3) Professor Perin.
- HBSK 6577. Psychoeducational aspects of deafness (0-3) Professor Kretschmer.
- HBSK 6578. Research: Family and school violence (1-3)
Professor Brassard.
HBSK 6584. Seminar: School psychology consultation (3)
Dr. Mascolo. In this course, students develop and practice basic skills in school consultation and counseling. Through readings, discussions, presentations, and role plays, students demonstrate an understanding of counseling theories and approaches, approaches to consultation, as well as practices consistent with professional ethics and legal standards. Students reflect on their own cultural background and acquire knowledge relevant to cross-cultural consultations.

HBSK 6903. Research-independent study in reading (1-3)
Faculty. Permission required. Advanced students work with professor on research projects related to literacy skills across the lifespan.

HBSK 7503. Dissertation seminar:
Schooling and reading (1-3)
Faculty. Permission required.
HBSK 8902. Dissertation advisement: Schooling and reading (0)
Faculty. Permission required. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For more information please see section on continuous registration for Ed.D. degree.


## Health Studies

The Health Studies area of study includes the following programs: Diabetes Education and Management, Health Education and Nursing Education.

## DIABETES EDUCATION AND MANAGEMENT

Program Coordinator:
Jane K. Dickinson, RN, PhD, CDE
Program Office: (646) 389-6242
Email: dickinson@tc.columbia.edu
Website: www.tc.edu/hbs/diabetes

## Degree Offered:

DIABETES EDUCATION AND MANAGEMENT (DEDM)
Master of Science (M.S.)

## Program Description:

The Diabetes Education and Management Program is an interdisciplinary 36 -credit Master of Science degree - the first of its kind. We will equip clinicians and care managers with a greater understanding of how diabetes develops and evolves across different populations; how to help patients manage treatment of their illness; how to develop, implement, and evaluate diabetes self-care management programs; and how to conduct advocacy at the national, state, and local levels. The program is offered entirely online.

Program requirements include coursework and a culminating project in which students will demonstrate their integration of the content they have learned. In addition to courses with content specific to diabetes, the program includes courses currently offered through the Health Education, Nutrition Education, Nursing Education, Human Development, and Adult Learning and Leadership programs of Teachers College.

## Special Application <br> Requirements/Information:

Applications for admission to the M.S. degree program are accepted and reviewed on a rolling basis. The Program Coordinator will arrange a phone interview once all application materials are on file. Applicants must be admitted and enrolled in order to apply for a Teachers College scholarship. The program's scholarship application deadline is April 20.

Admission Requirements include:

1. Bacclaureate Degree in relevant field from regionally accredited higher education institution
2. Preparation in one of the areas eligible to take the Certified Diabetes Educator Certification Examination, including clinical psychologist; registered nurse; occupational therapist; optometrist; pharmacist; physical therapist; physician (M.D. or D.O.); podiatrist holding a current, active, unrestricted license from the United States or its territories; dietitian holding active registration with the Commission on Dietetic Registration; physician assistant holding active registration with the National Commission on Certification of Physician Assistants; or exercise physiologist holding active certification as an American College of Sports Medicine Registered Clinical Exercise Physiologist ${ }^{\circledR}$
3. Academic qualifications consistent with graduate school, including undergraduate and/or graduate GPA of at least 3.0 on a 4.0 scale.
4. If an applicant's native language is not English, or if an applicant received his/her baccalaureate degree from an institution where English is not the official language of instruction, he/she must submit official scores from an accepted English proficiency exam. This requirement is in effect regardless of where the applicant received a prior graduate degree (if any).
5. Admission to the Diabetes Education and Management Masters degree program is based upon several criteria including adequacy and relevance of academic preparation; evidence of registration, licensure, or certification in one of the fields mentioned above; relevance of prior professional experience and related activities; and potential to benefit from additional professional preparation in diabetes education and management.

To be considered for admission to the Diabetes Education and Management Program, applicants must submit the following to the Teachers College Office of Admission:

- Online application
- Official transcripts from undergraduate and graduate programs
- Copies of registration, licensure, or certification in clinical psychology, nursing (registered nurses only), occupational therapy, optometry, pharmacy, physical therapy, medicine, osteopathy, podiatry, dietetics, physician assistant, or exercise physiology
- Two or three letters of recommendation
- Written personal essay of a few pages that includes your interest in diabetes, your experience as a diabetes educator, if any, and your career goals
- Resumé


## Degree Requirements:

The Master of Science in Diabetes Education and Management requires satisfactory completion of 36 course points and a Masters Integrative Project. The program may be pursued fulltime or part-time, but part-time students are encouraged to take at least 6 credits per semester to ensure timely completion of the program.

## Required Diabetes Related Core Courses (16 points):

- HBSD $4110 \quad$ Behavior change strategies for diabetes prevention and control (3)
- HBSD 4120 Pathophysiology of diabetes
- HBSD 4130 and its complications (3)
- HBSD 4130 Assessment of the person
- HBSD $4140 \quad \begin{aligned} & \text { with diabetes (3) } \\ & \text { Preventive and therapeutic }\end{aligned}$ interventions in diabetes management (4)
- HBSD 4150 Diabetes self-management education (DSME) programs: Development, implementation, and evaluation (3)


## Additional Required Core Courses (8-9 points):

- HBSS 5110 Determinants of health
- HBSS 5040 Research methods in health and behavior studies I (3)
- Multicultural Requirement: Choose at least one of the following; both may be taken in which case one will satisfy an elective requirement in Health Behavior and Nutrition:
- HBSS 6510 Research seminar in health education (3)
- HBSS 4141 Health and illness in crosscultural perspective (2-3)


## Elective Courses

(for a total of 11-12 points):

## Health Behavior and Nutrition Courses (3-9 credits):

Choose at least one from the following:

- HBSS 4001 Health provider communi-
- HBSS 4118 Principles of health-related behavior and social change: Initiation to maintenance (3)
- HBSS 5116 Social relations, emotions,
- HBSV 4000 Introduction to nutrition: Facts, fallacies, and trends (3)


## Education and Human Development

 (2-9 credits):Choose at least one from the following:

- ORLD 4050 Introduction to adult and
- ORLD 4051 continuing education (3)
- ORLD $4051 \quad$ How adults learn (3)


# Health and BEHAVIOR STUDIES 

- ORLD 4827
- HUDK 4029
- HUDK 4023 Developmental psychology: Adolescence (2-3)


## COURSES:

## HBSD 4110. Behavior change strategies

 for diabetes prevention and control (3) Professor Scollan-Koliopoulos. This course covers the complexity of the diabetes epidemic and the etiology, consequences, and treatment of diabetes. Biological, psychosocial, behavioral, environmental, and economic perspectives on the etiology and consequences of diabetes will be emphasized. A special emphasis will be placed on theoretical and evidence-based behavior strategies to prevent diabetes and to promote the health of those already diagnosed.
## HBSD 4120. Pathophysiology of diabetes and its complications (3)

Professor Dickinson. This course covers the physiology of normal energy metabolism and the pathophysiology of energy metabolism as seen in metabolic syndrome, the progression to type 2 diabetes, overt type 2 diabetes, as well as type 1 , gestational, and drug-induced diabetes. Comorbid conditions and acute and chronic complications of diabetes and hyperglycemia will be addressed.

## HBSD 4130. Assessment of the person with diabetes (3)

Professor Dickinson. This course teaches the clinician how to conduct a diabetes-focused assessment of the person with diabetes, with consideration for family dynamics and support. Emphasis is placed on cognitive, behavioral, and affective assessments, as well as select elements of the clinical assessment, i.e., the assessment of the "whole" person with diabetes. The findings from the assessment are then used as the basis for goal-setting.

HBSD 4140. Preventive and therapeutic interventions in diabetes management (4) Professor Dickinson. This course covers the specific components of multimodal therapies used to treat diabetes and associated comorbidities, as well as to prevent the acute and chronic complications of diabetes, referencing evidencebased clinical practice guidelines whenever possible. The major elements of, indications for, rationales for, and complications of current therapeutic regimens will be explored.

HBSD 4150. Diabetes self-management education (DSME) programs: Development, implementation, and evaluation (3) Professor Dickinson. This course provides specific guidance regarding implementation of the National Standards for Diabetes Self Management Education (ADA, 2007) to create Diabetes Self-Management Education (DSME) programs that will fulfill ADA recognition or AADE accreditation requirements.

## HEALTH EDUCATION

Program Coordinator:
Professor Barbara Wallace
Program Office: (212) 678-6607
Email: bcw3@columbia.edu
Website: www.tc.edu/hbs/HealthEd

## Degrees Offered:

HEALTH EDUCATION (HLTH)
Master of Arts (M.A.)
Master of Science (M.S.)
Doctor of Education (Ed.D.)

## Program Description:

The Program in Health Education at Teachers College has had a long history in preparing health education specialists. Health education is a professional field that has expanded rapidly, primarily because of national policy that has emphasized health promotion and disease prevention. Its goal is to facilitate voluntary healthrelated behavioral and social change through the application of principles of behavioral and social sciences.

As such, health education is concerned with motivating and enabling individuals and groups to assume responsibility for their health by learning and adopting behaviors and supporting social policies that can promote and maintain health.

The program at Teachers College is grounded in the belief that community-level structures and organizations play a key role in determining the health of the people. It offers courses in which students learn to analyze and understand and thus become able to influence community structures that either enhance or undercut healthpromoting individual behaviors.

In addition to Health Education courses, students are encouraged to pursue interdisciplinary study and research throughout Teachers College, as well as other divisions of Columbia University such as the School of Public Health and the Graduate School of Arts and Sciences. The Center for Health Promotion at Teachers College, which involves students and faculty, provides opportunities to take part in ongoing research projects in health promotion and disease prevention.

Students also may participate in research being conducted in the Research Division at the Hospital for Special Surgery, the Department of Medicine at the Weill Medical College of Cornell University, or with the

Diabetes Research and Training Center at the Albert Einstein College of Medicine. All have multi-institutional collaborative efforts involving faculty from the Program in Health Education at Teachers College.

The program prepares graduates who will assume positions of leadership and service as professional health educators in a variety of practice, research, and policy-making settings. Graduates of the program take positions as leaders in health promotion and disease prevention programs of voluntary health agencies, hospitals and other health care organizations, universities, business and industry, and healthrelated governmental agencies in the United States and in other countries.

Each degree program has some flexibility in order to accommodate differences in previous professional preparation, interests, and professional career objectives of students. In general, the programs of study emphasize the development of competencies in assessing individual and community need for health education; planning effective health education programs; implementing health education programs; coordinating the provision of health education services; acting as a resource person in health education; communicating health and health educational needs, concerns, and resources; evaluating the effectiveness of health education programs; and conducting research in health education.

Students at both the master's and doctoral levels are encouraged to become actively involved in departmental, college, and university functions that facilitate interaction with faculty and other students and that have the potential to enrich the student's intellectual and professional growth. They are expected to undertake the complex and challenging tasks associated with graduate study and other related learning experiences in such a manner as to demonstrate their intellectual discipline. Such discipline includes integrity, creativity, and innovation, as well as the student's abilities to conceptualize at a high level, think critically, communicate effectively both orally and in writing, and provide leadership.

Students also are expected to demonstrate the ability to appreciate, relate to, and communicate with ethnically, racially, and linguistically diverse individuals and groups of people who possess different personal, social, and cultural histories than their own. They are also encouraged to develop a strong sense of professional identity and commitment to professional affairs in health education. This might take the form of active membership in appropriate national,
regional, or local professional organizations, participation in professional meetings, presenting an abstract or a paper at a professional meeting, or serving on a professional committee.

Completion of the M.A. degree program makes graduates eligible to qualify for certification as a Certified Health Education Specialist through the National Commission for Health Education Credentialing, Inc. Specific information regarding each program and its degree requirements can be obtained by writing to the program coordinator, Professor John P. Allegrante.

## Special Application <br> Requirements/Information:

The deadlines for application for admission to the M.A. and M.S. degree programs are January 15 (early deadline) and April 2 (final deadline), with ongoing review of applications. The application deadline for admission to the Ed.D. degree program is January 15.

Admissions to the M.A., M.S., and Ed.D. degree programs is based upon several criteria including adequacy and relevance of undergraduate preparation, relevance of prior professional experience and related activities, and potential to benefit from additional professional preparation in health education. In general, applicants who present strong undergraduate academic preparation in the behavioral and social sciences, education, nursing, public health, social work, or allied health professions are given priority consideration for admission to the program. Applicants to the Ed.D. degree program are required to submit a writing sample at the time of application (preferably a course paper, master's thesis, or published article).

## Degree Requirements:

## Master of Arts

The minimum College requirements for the Master of Arts degree in Health Education include satisfactory completion of a program of no less than 30 points of coursework and a formal essay or 32 points with an acceptable departmental integrative project. At least 20 points must be earned in Teachers College courses. In order to broaden the student's background in education, no fewer than three Teachers College courses from outside the major department, each for a minimum of 2 points, must be taken. The remaining coursework may be completed at Teachers College or in other graduate divisions of the University, but no more than 12 points from other faculties of the University will be credited toward the minimum point requirement. No transfer
credit is granted for work completed at other institutions.

The program of study includes required and elective courses in several areas. The exact program and sequence of study are determined by the student's previous academic preparation, professional experience, and professional career objectives. Programs of study typically exceed the minimum College requirement of 32 points. Selection of courses that fulfill an area requirement in the program of study listed below is guided by individual needs of the student and is not limited to those courses that are listed. It should be noted that the point requirements indicated for each area of study given below are minimum requirements.

MAJOR (21 pOINTS)
Required Core Courses (12 points):

- HBSS $4100 \quad$ Behavioral and social science foundations of health education (3)
- HBSS 4102 Principles of epidemiology in health promotion (3)
- HBSS 4118 Principles of health-related behavior and social change: Initiation to maintenance (3)
- HBSS 5110 Determinants of health behavior (3)


## Elective Courses (9 points):

- HBSS 4001 Health provider communications (3)
- HBSS 4110 Health promotion for children and adolescents (3)
- HBSS 4111 Addictions and dependencies (3)
- HBSS 4112 Social policy and prevention (3)
- HBSS 4113 Human sexuality education (3)
- HBSS 4114 Health promotion for multicultural populations (3)
- HBSS 4115 Health promotion for aging adults (3)
- HBSS 4116 Health education for
- HBSS 4117 HIV/AIDS epidemiology and education (3)
- HBSS 4120 Topics in health education (2-3)
- HBSS 4121 Death education (3)
- HBSS 4122 Women's health (3)
- HBSS 4123 Violence and its prevention (3)
- HBSS 4130 Alcohol and health (3)
- HBSS 4140 Developing workplace health promotion programs (3)
- HBSS 4141 Health and illness in crosscultural perspective (3)
- HBSS 4901 Research and independent study in health education (1-4)
- HBSS 5000 Health promotion in higher education (3)
- HBSS 5111 Planning health education programs (3)
- HBSS 5112 Social marketing and health communications (3)
- HBSS 5113 Community health analysis and intervention (3)
- HBSS 5115 Assessment and counseling for health promotion (3)
- HBSS 5116 Social relations,
emotions, and health (3)
- HBSS 5408 Practicum in individual
- HBSS 5410 $\quad$ health advisement (3)
education (1-6)
- HBSS 6100 Measurement and program
evaluation (3)
- HBSS 6145 Health psychology (3)
- HBSV 4000 Introduction to nutrition:
Facts, fallacies, and trends (3)
- HBSV 4010
- HBSV 4011

Food, nutrition, and behavior (3)
Women and weight, eating problems and body image (2)

- HBSV 4013


## Broad and Basic Areas of Professional Scholarship and Practice (6-9 points):

- One course in learning theory pertaining to a population group of interest, such as the child, adolescent, adult, or older adult.
- One course in communications, computing, or instructional technology and media.
- One required course in research methods, evaluation, measurement, or statistics.

$$
\begin{array}{ll}
\text { - HBSS 5040 } & \begin{array}{l}
\text { Research methods in } \\
\text { health and behavior } \\
\text { studies I (3)* }
\end{array}
\end{array}
$$

*Substitutions may be permissible with approval from a Health Education advisor.

## Essay or Integrative Project

In order to broaden the student's background in education, a formal essay or integrative project is required.

## Master of Science

The Master of Science degree requires a minimum of 60 points and an essay or project. The College requires that a minimum of 30 points and formal essay or 32 points with an integrative project be completed under the auspices of Teachers College, including 18 points that must be earned in Teachers College courses. In order to broaden the student's background in education, no fewer than three Teachers College courses from outside the major department, each for a minimum of 2 points, must be taken. The remaining coursework may be completed at Teachers College or in other graduate divisions of the University.

Although no transfer credit toward the Master of Science is granted for work completed at other institutions, a maximum of 30 semester
hours (or 28 points if a formal essay is not submitted) of graduate credit may be used from other recognized institutions to reduce the degree requirement. Applicants who have completed the Master of Arts (M.A.) degree in Health Education through Teachers College, which is applicable to the M.S. degree, must offer a minimum of 45 points of the required 60 points under Teachers College registration.

The program of study for the Master of Science degree in Health Education includes required and elective courses in several areas. The exact program and sequence of study is determined by the previous academic preparation, professional experience, and professional career objectives of the student. Selection of courses that fulfill an area requirement in the program of study listed below is guided by individual needs of the student and is not limited to those courses that are listed. It should be noted that the point requirements indicated for each area of study given below are minimum requirements.

## MAJOR (36 POINTS)

Introductory Core Courses (9 points):

- HBSS 4100 Behavioral and social science foundations of health education (3)
- HBSS 4102 Principles of epidemiology
- HBSS 4118 $\begin{aligned} & \text { in health promotion (3) } \\ & \text { Principles of health-related }\end{aligned}$ behavior and social change: Initiation to maintenance (3)


## Advanced Core Courses

(Required 15 points):

- HBSS 5110 Determinants of health behavior (3)
- HBSS 5111 Planning health
education programs (3)
health communications (3)
- HBSS 6100 Measurement and program evaluation (3)
- HBSS 6145 Health psychology (3)
- Elective Courses (12 points)
(See M.A. elective list for course selection)
- Essay or Integrative Project

Broad and Basic Areas of Professional Scholarship and Practice (18 points):

- Nature of education, persons and learning processes (required 6 points)
- Communications, computing, and instructional technology and media (required 2-3 points)
- Methods of evaluation and research (required 9 points)
- General research methods (required HBSS 5040, 3 points)*
- Statistics (required 3 points)
- Measurement and evaluation
(Required 2-3 points)
* Substitutions may be permissible with an approval from a Health Education advisor.


## Doctor of Education

The Doctor of Education degree requires a minimum of 90 post-baccalaureate points and the preparation and defense of a dissertation. Up to 45 graduate-level points taken at other institutions may be transferred toward doctoral requirements. Candidates for the Ed.D. degree are also expected to demonstrate satisfactory performance on a departmental certification examination and to prepare and defend an acceptable dissertation project. In addition to the College requirements, all candidates for the Ed.D. degree in Health Education must have fulfilled the equivalent of the requirements for the Master of Arts (M.A.) degree in health education.

For those students entering the doctoral program with only a baccalaureate degree, the M.A. degree must be completed first. Those applicants who, at the time of admission to the program, do not present the equivalent of a master's thesis are required to prepare and present an acceptable essay or pre-doctoral project prior to or during the term in which 60 points of applicable graduate study have been completed.

The program of study for the Doctor of Education degree in Health Education includes required courses, coursework in required areas, and elective courses. The exact program and sequence of study is determined by the previous academic preparation, professional experience, and professional career objectives of the student. Programs of study typically exceed the minimum College requirement of 90 points, with most candidates offering between 90-120 points for the degree. Selection of courses that fulfill an area requirement in the program of study listed below is guided by individual needs of the student and is not limited to those courses that are listed.

A student who presents evidence of proficiency in those required courses or in an area of coursework required for the program may, at the discretion of the major advisor and upon approval of the department chairman, select and substitute courses that represent more advanced study in the area in which the student has demonstrated competence or additional preparation in other areas in which the student's preparation is less extensive. It should be noted that the point requirements indicated for each area of study given below are minimum requirements.

## MAJOR (50 POINTS) <br> Introductory Core Courses

(Required 9 points):

- HBSS 4100 Behavioral and social science foundations of health education (3)
- HBSS 4102 Principles of epidemiology in health promotion (3)
- HBSS 4118 Principles of health-related behavior and social change: Initiation to maintenance (3)


## Advanced Core Courses <br> (Required 15 points):

- HBSS 5110 Determinants of health behavior (3)
- HBSS 5111 Planning health education
- HBSS 5112 programs (3)
- HBSS 5112 Social marketing and
- HBSS 6100 healiconin (3)

Measurement and program

- HBSS 6145 Health psychology (3)


## Elective Courses (21 points):

(See M.A. list for course selection)

## Research Seminar and Preparation of the Dissertation (5 points):

- HBSS 6510 Research seminar in health education (3)
- HBSS 7501 Dissertation seminar in health education (2)
- HBSS 8900 Dissertation advisement in health education (0)

Broad and Basic Areas of Scholarship and Practice (27-30 points):

- Nature of education, persons, and learning processes (required 6-9 points)
- Communications, computing, and instructional technology and media (required 2-3 points)
- Methods of evaluation and research (required 17-18 points)
- General research methods (required 6 points)
- Statistics (required 6 points)
- Measurement and evaluation (required 5-6 points)


## COURSES:

## Introductory Courses

HBSS 4001. Health provider communications (3)
Dr. Marks. Emphasizes and reviews the importance of effective communications and health literacy in promoting health of diverse communities. Effective communication strategies and approaches that foster self-management and health status are covered.

HBSS 4100. Behavioral and social science foundations of health education (3) Professor Allegrante. Determinants of health; relationship between health and human behavior; the role of health education as a strategy in health promotion and disease prevention; selected issues and problems.

HBSS 4102. Principles of epidemiology in health promotion (3)
Professor Basch. Principles and methods of epidemiologic investigation; application of epidemiology to prevention and control of disease, using health education.

## HBSS 4110. Health promotion for

 children and adolescents (3)Faculty. Basic topics in promoting child and adolescent health; relationships between school, family, and community in promoting the health status of school-age children.

HBSS 4111. Addictions and dependencies (3) Professor Wallace. Social-psychological, cultural, clinical, and pharmacological factors associated with the use of psychoactive drugs and other compulsive behaviors.

HBSS 4112. Social policy and prevention (3) Professor Allegrante. Analysis of current national health policy, its social, economic, and political determinants, and implications for health education.

HBSS 4113. Human sexuality education (3)
Faculty. Explore human sexuality from a variety of perspectives; explore students' own attitudes about human sexuality and how they affect them personally and professionally; examine methods of teaching and designing sexuality education programs.

HBSS 4114. Health promotion for multicultural populations (3)
Professor Wallace. Health status, needs, and problems of multicultural populations in urban environments and sensitivity to these issues in effective programs.

## HBSS 4115. Health promotion for aging

 adults (3)Dr. Marks. Changes in aspects of health during the middle and later years; recent developments in the field of gerontology as well as legislation and community organization designed to meet health needs of aging persons.

## HBSS 4116. Health education for teachers

 (1-3)Dr. Roberts. As part of teacher certification in New York and other states, students must be trained in the following health areas: reporting child abuse, instruction in alcohol and other drugs, and school violence prevention. This course satisfies these requirements and reviews theory and research on children's health and health behavior change. Students will learn how to develop health-related lesson plans and how to identify, prevent, or intervene on behalf of children at risk or presenting with social-emotional or physical health problems.

HBSS 4117. HIV/AIDS epidemiology and education (3)
Faculty. The role of schools, parents, and communities in educating youth about AIDS and human sexuality; review of methods and resource materials for providing such education; consideration of controversial issues surrounding these topics.

HBSS 4118. Principles of health-related behavior and social change: Initiation to maintenance (3)
Professor Wallace. Theory and techniques for initiating and maintaining change for a variety of addictive and problem behaviors, including a focus on integrating relapse prevention, stages of change, and motivational interviewing. Attention is also paid to facilitating social change in varied organizational settings.

HBSS 4120. Topics in health education (2-3) Faculty. Review and synthesis of current knowledge on a selected topic related to health, such as teenage suicide, child abuse, violence, teenage pregnancy, and mental health.

HBSS 4121. Death education (3)
Dr. Coleman. Designed to increase awareness/insight of the multidimensional aspects of death, dying, and bereavement. Gain skills as health care professionals in dealing with death, its causes, treatment of life-threatening illness, including AIDS, suicide, and violent death. Explore customs across cultures, afterlife beliefs, near-death experiences, and ethical issues.

HBSS 4122. Women's health (3)
Faculty. Explore biologic and environmental influences on women's health risks and disease. Additionally, students will acquire knowledge to evaluate clinical studies in the literature and gain basic understanding of the process of planning and developing women's health promotion programs.

HBSS 4123. Violence and its prevention (3) Professor Wallace. This course covers the nature and prevention of invisible and covert, as well as visible and overt violence, including intrapersonal, interpersonal, family, community, gang, school, societal, and international manifestations.

HBSS 4130. Alcohol and health (3) Professor Wallace. Background and theory related to alcohol use and misuse; health and social consequences of alcohol misuse; consideration of special populations, such as children of alcoholics; review of alternative approaches to prevention and treatment.

## HBSS 4140. Developing workplace

health promotion programs (3)
Professor Allegrante. Provides a comprehensive step-by-step process to designing, implementing, and evaluating health promotion programs at the workplace.

HBSS 4141. Health and illness in crosscultural perspective (2-3)
Faculty. Examination of the role of healing and medicine, both historically, and cross-culturally and of the utility of considering cultural practices and beliefs when designing health education programs.

## Intermediate and Advanced Courses

HBSS 5000. Health promotion in higher education (3)
Dr. Kernan. This course will explore the complex issues and challenges facing those working to enhance the quality of student health and student learning at college and universities.

## HBSS 5110. Determinants of health

behavior (3)
Professor Allegrante. Theory-based analysis of the cultural, social-psychological, and socialstructural determinants of health-related behaviors; implications for planned change at individual, small-group, and community levels.

HBSS 5111. Planning health education programs (3)
Professor Basch. Process of developing social, epidemiological, behavioral, and educational diagnoses; principles of planning, implementing, and evaluating health education interventions.

HBSS 5112. Social marketing and health communications (3)
Faculty. Principles and theories of marketing and communication applied to health education. Practice in developing and evaluating health communications.

HBSS 5113. Community health analysis and intervention (3)
Faculty. Survey and analysis of concepts, issues, strategies, and methods relevant to community health analysis and intervention.

HBSS 5115. Assessment and counseling for health promotion (3)
Professor Wallace. Assessment of clients' health-compromising behaviors to reduce relapse and facilitate referrals to mental health staff; interventions for motivational counseling, psychoeducational group, and focus group formats are covered.

HBSS 5116. Social relations, emotions, and health (3)
Faculty. Covers theory and research on the effects of social relationships and emotions on health. Reviews and evaluates the use of social support and expressive writing interventions for treating chronic health problems, such as heart disease, cancer, and arthritis, or acute illnesses, such as upper respiratory infections. Also considers the role of emergent technologies in supportive-expressive therapies.

HBSS 5408. Practicum in individual health advisement (3)
Faculty. Individual and small group practice in the application of basic principles of counseling in the area of health problems.

# Health and <br> BEHAVIOR STUDIES 

HBSS 5410. Practicum in health education (1-6)
Faculty. Permission required. Advance registration required in the semester prior to taking the course. Intensive field experience in a community setting. Essay required at end of field experience.

HBSS 5710. Supervised teaching in health education (1-6)
Faculty. Permission required. Advance registration required in the semester prior to taking the course. Supervised health teaching in a school. Essay required at end of teaching experience.

HBSS 6100. Measurement and program evaluation (3)
Professor Basch. Theory, methods, and problems of measurement and evaluation; standards for evaluation of health, education, and related social programs; skills in critical evaluation of research and evaluation reports.

HBSS 6145. Health psychology (3) Professor O'Connell. Topics include social learning theory, attribution, and attitudes as they apply to health promotion, disease prevention, reactions to illness, and adherence to treatment regimens.

## Seminars and Research

HBSS 4901. Research and independent study in health education (1-4) Faculty. Permission required. Research and independent study under faculty direction. Proposals must have prior approval of a faculty member.

HBSS 5040. Research methods in health and behavior studies I (3)
Professor O'Connell. Introduction to research, study designs, and data collection methods in research in health and behavior studies, including nursing, nutrition, and health education with emphasis on reading and understanding research literature.

HBSS 5510. Seminar in health
education (3)
Faculty. Current problems, issues, and trends in health education.

## HBSS 6500. Research grant writing

for health and behavior studies (3) Professor O'Connell. Techniques of research grant preparation with emphasis on National Institutes of Health grants will be covered. Students will prepare an actual grant. In addition, funding agencies, the budgeting process, building research teams, the review process, responding to reviewers, and resubmitting grants will be covered.

HBSS 6510. Research seminar in health education (2-3)
Faculty. Permission required. Review of research literature, methods, and problems in health education.

HBSS 6901. Research and independent study in health education (1-6) Faculty. Permission required. Open to matriculated doctoral students. Research and independent study under faculty direction. Proposals must have prior approval of a faculty member.

HBSS 7501. Dissertation seminar in health education (2)
Faculty. Permission required. Open to certified doctoral candidates only. Development and presentation of doctoral dissertation proposals.

HBSS 8900. Dissertation advisement in health education (0)
Faculty. Permission required. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term.

## NURSING <br> EDUCATION

Program Coordinator:
Professor Kathleen A. O'Connell

| Program Office: | (212) 678-3120 |
| :--- | :--- |
| Email: | ko199@columbia.edu |

Website: www.tc.edu/hbs/NurseEd

## Degree Offered:

NURSING EDUCATION- PROFESSORIAL ROLE (NURS)
Doctor of Education (Ed.D.)*
This program is currently not accepting applications for admission. For information about the program please call the Office of Admission at (212) 678-3710.

## Program Description:

Teachers College was the first academic setting to educate nurses. Nursing education began at Teachers College in 1899. The Nursing Education Program has a long and distinguished tradition of commitment to the education of nurses who have diverse roles in academic and community settings in the United States and abroad. Current placement of the program within the Department of Health and Behavior Studies ensures education with an interdisciplinary approach to problems in nursing, health, and society.

This program is designed for:
(1) Nurse practitioners with master's degrees who want to take the lead in developing innovative interventions for improving health behavior outcomes in primary care;
(2) Nurse educators with master's degrees who want to gain more expertise in all aspects of education, including gaining the research skills that all faculty of the 21 st century will be expected to have; and (3) Clinical specialists with master's degrees who want to improve their effectiveness in helping patients with chronic illness achieve maximal functioning.

The purpose of this program is to give students who are registered nurses with master's degrees in nursing doctoral-level education aimed at understanding and changing health behavior. It is well established that over $50 \%$ of mortality of U.S. citizens can be attributed to lifestyle. With the globalization of the marketplace and of epidemics of infectious diseases, lifestyle and health behavior also significantly affect the health and well-being of much of the world's population. Graduates of this program will be prepared to design interventions and conduct research on health behavior, health education, and health promotion. In addition, graduates of the program will be conversant
with theory and current trends in nursing so that they can use nursing knowledge and expertise to improve the health and well being of the citizens of the United States and of the global community.

To ensure that knowledge in nursing and in health behavior and health promotion is passed on to the next generation of nurses, graduates of this program will also be prepared to engage in educationally sound programs for nursing students and for clients. Graduates of the program will thus be able to take their place among distinguished nursing leaders who carry out cutting-edge research and engage in innovative strategies for teaching clients to modify their health behavior.

In order to build on previous work done by nurses and other investigators in the health behavior arena, students will attain a background in the study of nursing theory, nursing research, and professional issues affecting the nursing profession. In addition, students will gain expertise in managing health behavior change and in using research and statistical approaches. Study of methods and approaches to teaching clients and to teaching nursing students at undergraduate and graduate levels will be included as an integral part of the preparation of nurse scholars. Students also are expected to demonstrate the ability to appreciate, relate to, and communicate with ethnically, racially, and linguistically diverse individuals who possess different personal, social, and cultural histories than their own.

## Special Application <br> Requirements/Information:

In addition to the requirements for admission to Teachers College, an applicant for the Doctor of Education degree in Nursing must be a registered nurse in any U.S. state or in Canada and hold a baccalaureate degree and a master's degree. Applicants are required to take the Graduate Record Examination (GRE) and provide a writing sample (a course paper, master's thesis, published paper, or other scholarly writing). The personal statement should include the research interest area of the applicant.

## Degree Requirements:

The Doctor of Education program in Nursing Education requires a minimum of 90 points beyond the baccalaureate degree. Up to 38 graduate-level points taken at another institution may be transferred toward doctoral requirements. For all students, the program includes coursework in four areas: nursing, health behavior, research, and education. In addition, students choose a functional emphasis area in research, education, or another area
consistent with the program and with advisor approval. Nine points in addition to those points required of all students must be taken in the functional area. Points will be allotted as follows:

| Nursing | 42 points |
| :--- | ---: |
| Health and Behavior | 12 points |
| Research | 18 points |
| Education | 6 points |
| Emphasis area | 9 points |
| Elective | 3 points |
| Total | 90 points |

Nursing Courses

- HBS $5551 \quad$ Bioethics (3)
- HBSS 6500

Research grant writing for health and behavior studies (3)

- HBSN 6501 Seminar in professional nursing (1)
- HBSN 6503 Advanced topics in
theories of nursing (3)
- HBSN 6908 theory (3) $\quad$ Independent study in professional nursing (1-3)
- HBSN 6909 Independent study in nursing theory ( $1-3$ )
- HBSN 6940 Independent study in nursing research (1-3)

Health and Behavior Studies Courses

- HBSS 4102 Principles of epidemiology
in health promotion (3)
- HBSS 4114 Health promotion for
multicultural populations (3)
- HBSS 4115 Health promotion for aging adults (3)
- HBSS 4118 Relapse prevention for problem behaviors (3)
- HBSS 5110 Determinants of health behavior (3)
- HBSS 5112 Social marketing and health communications (3)
- HBSS 5113 Community health analysis and intervention (3)
- HBSS 5115 Assessment and counsel-
ing for health promotion (3)
- HBSS 6145 Health psychology (3)
- HBSV 4011 Women and weight, eating problems and body image (2)
- HBSV 5013 Strategies for nutrition education and health behavior change (3)
- HBSV 5015 Nutritional epidemiology (3)


## Nursing Education

(Courses may also be selected from the courses focused on adult education in the Department of Organization and Leadership and appropriate education courses in other departments)

- HBSN 6530 Seminar on curriculum in nursing education (3)
- HBSN 6635 Colloquium in nursing education (3)
- HBSN 6930 Independent study in nursing education (1-3)
- HBSN 5043 Research methods in

Research

- HBSS 5040
- HBSN 6540
- HBSN 6541
- HBSN 7500
- HBSN 8900


## Research methods in

 health and behavior studies I (3) health and behavior studies II (3)Seminar on dissertation design development (3)
Advanced seminar on dissertation design development (3)
Dissertation seminar (3)
Dissertation advisement (0)

Additional statistics and research methods courses from Department of Human Development: HUDM 4122 and HUDM 5122 or equivalents required.

## COURSES:

## General Nursing Courses

Nursing domain courses deal with theory, professionalization, research, issues, and trends. They are also open to interested students, nurses or non-nurses, from other departments and include coursework in nursing theory, professional nursing, and nursing research.

## Nursing Theory

HBS 5551. Bioethics (3)
Dr. Camuñas. Review of bioethical issues in society, health care, and health care delivery.

## HBSN 5005. Interdisciplinary theory

 in nursing (3)Professor O'Connell. Prerequisites: HBSS 5110, HBSN 6503, HBSS 5040, or equivalents. Evaluation of utility of theories and models from nursing and related disciplines in posing research problems in nursing.

HBSN 5040. Research methods in health and behavior studies I (3)
Professor O'Connell. Introduction to research, study designs, and data collection methods in research in health and behavior studies including nursing, nutrition, and health education with emphasis on reading and understanding research literature.

HBSS 6500. Research grant writing for health and behavior studies (3) Professor O'Connell. Techniques of research grant preparation with emphasis on National Institutes of Health grants will be covered. Students will prepare an actual grant. In addition, funding agencies, the budgeting process, building research teams, the review process, responding to reviewers, and resubmitting grants will be covered.

# Health and <br> Behavior Studies 

HBSN 6503. Advanced topics in theories nursing (3)
Dr. Camuñas. Examination of current issues, utility, and applications of nursing theories. Critical analyses of selected theories.

HBSN 6600. Colloquium in nursing theory (3)
Professor O'Connell. Prerequisites: two courses in nursing theory. Examination of a selected nursing theory or theory problem in depth. Course may be repeated for credit if different topics are covered.

## HBSN 6909. Independent study in

 nursing theory (1-6)Faculty. Permission required. Individual guided learning experience in a selected nursing theory or theory problem. Topic agreed upon between student and faculty.

## Professional Nursing

## HBSN 6501. Seminar in professional

 nursing (1)Professor O'Connell. Examination of selected professional nursing problems or domains.

HBSN 6908. Independent study in professional nursing (1-6)
Faculty. Permission required. Individual guided learning experience at the doctoral level in a selected aspect of professional nursing. Topic agreed upon between student and faculty.

## Nursing Research

HBSS 5040. Research methods in health and behavior studies I (3)
Professor O'Connell. Introduction to research, study designs, and data collection methods in research in health and behavior studies, including nursing, nutrition, and health education with emphasis on reading and understanding research literature.

HBSN 5043. Research methods in health and behavior studies II (3)
Professor O'Connell. Prerequisites: HBSS 5040, HUDM 4122, or equivalents. Builds on introductory research methods course to enhance ability to design research, interpret findings and statistical analyses, and critique research reports.

## HBSN 6540. Seminar on dissertation

 design development (3)Faculty. Permission required. Prerequisites: HBSN 5043, HBSN 6503, HBSN 5005, statistics, and certification. Required of all doctoral candidates. Group critique of dissertation proposals; focus on beginning- to intermediatelevel aspects of analysis of theory and research design. This course may be repeated as often as necessary until the student is ready for the departmental examination. Once HBSN 6540 is taken, continuous fall/spring enrollment in the course is required until the semester during which the departmental examination is held.

HBSN 6541. Advanced seminar on dissertation design development (3) Faculty. Permission required. Prerequisite: HBSN 6540 and certification. Focus on advanced aspects of research design and method.

HBSN 6940. Independent study in nursing research (1-6)
Faculty. Permission required. Allows student to contract with individual faculty member for research-related work in a defined area of study.

## HBSN 7500. Dissertation seminar in

 nursing (3)Faculty. Permission required. Prerequisite: HBSN 6540 and certification. The departmental examination, involving presentation of dissertation proposal for faculty approval. This course is required of all certified doctoral candidates and may be taken only once.

## HBSN 8900. Dissertation advisement

 in nursing ( 0 )Faculty. Individual advisement on doctoral dissertation following completion of all coursework. Fee to equal 3 points at current tuition rate for each term. See catalog on continuous registration requirements for Ed.D. degree.

## Nursing Education

HBSN 6530. Seminar on curriculum in nursing education (3)
Faculty. Permission required. Open only to doctoral candidates. Intensive study of selected issues and/or designs in nursing curricula.

HBSN 6635. Colloquium in nursing education (3)
Faculty. Prerequisite: Determined by instructor based on topic selected. Examination of selected problems in nursing education practice and administration. Course may be repeated for credit if different topic covered.

HBSN 6930. Independent study in nursing education (1-6)
Faculty. Permission required. Individual guided learning experience at the doctoral level in a selected aspect of nursing education. Topic agreed upon between student and faculty.

## Nutrition

The Program in Nutrition offers degrees in the following areas: Nutrition Education; Nutrition and Public Health; Community Nutrition Education; Applied Physiology and Nutrition; Behavioral Nutrition. (Note that a title change is pending for the Applied Physiology and Nutrition program. The program will be renamed as Nutrition and Physical Activity.)

Program Coordinator:
Professor Isobel R. Contento
Program Office: (212) 678-3950
Email: nutrition-tc@columbia.edu
Website: www.tc.columbia.edu/hbs/Nutrition

## Degrees Offered:

NUTRITION EDUCATION (NUTR)
Master of Science (M.S.)
Doctor of Education (Ed.D.)
NUTRITION AND PUBLIC HEALTH (NUTH)
Master of Science (M.S.)
Doctor of Education (Ed.D.)
COMMUNITY NUTRITION EDUCATION (NUTC)
Master of Education (Ed.M.)
APPLIED PHYSIOLOGY AND NUTRITION
(APPN)
Master of Science (M.S.)
BEHAVIORAL NUTRITION (NUBH)
Doctor of Philosophy (Ph.D.)

## Program Description:

There is an increased awareness that the quality of the diets that people habitually consume contributes to the quality of their lives. Since its founding in 1909, the Program in Nutrition at Teachers College has been a leader in developing strategies for promoting health through encouraging dietary change.

Current academic initiatives and research focus on analyzing and facilitating change in individuals and communities and on ways of modifying both personal choice and the food system within which such choices are made. In particular, faculty and students are engaged in a number of food and nutrition-related demonstrations and research projects including the cognitive and psychosocial factors influencing food choice in children, adolescents, and adults; characteristics of the dietary change process; nutritional epidemiology; issues in clinical nutrition, exercise, and nutrition; food and environment education in schools; food policy; and social, economic,
and technological factors affecting the longterm sustainability of the food system. Building on its rich history, the Teachers College program aims to prepare graduates to take positions of leadership and service in nutrition counseling and education in health promotion and disease prevention programs, health agencies, hospitals, private practice, media organizations, and the workplace; to serve as teachers, faculty, or resource specialists in schools and universities; to fill a variety of planning, instructional, and administrative roles in community and public health agencies; to work in organizations that promote policy and systems change; or to serve as researchers in a variety of areas related to behavioral aspects of diet, nutrition education, nutritional epidemiology, public health nutrition, nutrition and exercise, and sustainability of the food system.

The program provides students a thorough grounding in nutrition science, nutrition education, and nutrition in clinical and public health settings. In addition, the program emphasizes the development of competencies in:

- Designing and implementing nutrition education with individuals, groups, and communities;
- Facilitating healthful and ecologically sustainable food choices;
- Conducting clinical assessments and nutrition counseling;
- Designing and implementing public health nutrition assessments and programs;
- Understanding and applying principles of nutritional epidemiology;
- Applying nutrition science and exercise science principles to recreational and competitive athletes;
- Thinking critically and independently;
- Acting collaboratively and effectively with others in organizations and communities on important issues related to food, nutrition, and sustainability of the food system;
- Conducting food and nutrition-related research.

Because of the breadth of its aims, the program has long admitted academically qualified students with undergraduate degrees in fields other than nutrition or the related sciences (so long as they can meet the science prerequisites), since such students often bring valuable skills and attitudes to the graduate study of nutrition.

The program puts a heavy emphasis on providing students with practical experiences in addition to traditional classroom lectures and discussions. Among the course-related educational experiences available to students are field
experiences in community nutrition, planning, and teaching of nutrition sessions to selected audiences in the community, food education and gardening projects in schools, dietary analyses, and online computer activities. Supervised practicum is included in the Applied Physiology and Nutrition degree. Students are welcome to participate in research and demonstration projects within the Program in Nutrition. These include food and environmental education programs designed for children, parents and teachers, childhood obesity prevention, and fruit and vegetable promotion in urban communities. In particular, the Center for Food and Environment (www.tc.edu/cfe) conducts activities within the research, education, and policy arenas. Because of Teachers College's location in New York City, there are also virtually unlimited opportunities for students to become involved in a variety of food/ nutrition-related activities. The faculty and staff can arrange for students who have credit hours available to receive credit for such activities where appropriate.

## Dietetic Internship Program

For students interested in professional certification as Registered Dietitians (R.D.), the Department sponsors a Dietetic Internship Program accredited by the Commission on Dietetic Registration. Students may begin the internship in September each year.

The Internship is designed to bridge a student's academic education and professional career and thus focuses on developing practitioner skills. The Internship sequence of courses (HBSV 5241-HBSV 5244) is offered on a near full-time basis requiring eleven months to complete. Students may complete the requirements for the Dietetic Internship Program concurrently while completing the requirements for the M.S. degree programs in Nutrition. Students must satisfy all academic requirements for the degree award and the Dietetic Internship. Our CADE didactic program advisor will work with students to develop an integrated plan of study and to facilitate the process. Students who successfully complete the Dietetic Internship are then eligible to take the registered dietitian certification examination.

Students may enroll for all degree programs on a full-time or part-time basis.

## Special Application Requirements/Information:

The Nutrition Program has ongoing admissions, and will review applications throughout the year. Preference in scholarship awards will be for those applicants who meet the College early deadline of February 1st.

The GRE General Test is required for all degrees. A writing sample is required for doctoral applicants, preferably a master's thesis, course paper, or published article.

For full admittance, applicants must also provide evidence of completion of prerequisite courses, including introductory nutrition, statistics, general and organic chemistry with labs, biochemistry (requiring organic chemistry as a prerequisite), and two semesters of human physiology with labs. Introductory nutrition, biochemistry, and human physiology must have been taken within five years with a grade of $B$ or better. Courses in food science and in food management and a course in microbiology are also required for students wishing to become registered dietitians.

Students in Nutrition may also complete a Dietetic Internship option accredited by the Commission on Dietetic Registration. Applicants who wish to complete the Dietetic Internship (DI) option must submit an application through the centralized dietetic internship application system (DICAS). Applications are due February 15th each year for a September start date. The DI program participates in the computer matching system for dietetic internship through D \& D Digital systems. (See Nutrition website for more information). Applicants to the DI must apply and be fully admitted to the M.S. program. For students who do not have a bachelor's degree that satisfies DPD, the needed coursework can be completed through a combination of undergraduate courses and master's courses. Our academic program advisor will work with students to develop an integrated plan of study and to facilitate the process.

Admission to the doctoral programs is based upon the applicant's academic and work record. Normally a student will be formally admitted to the doctoral program only after completion of coursework equivalent to the $40-50$ point Master of Science degrees or the 60 -point Master of Education degree.

## Degree Requirements:

## Master of Science

The major program emphases are in the fields of Nutrition Education, Nutrition and Public Health, and Applied Physiology and Nutrition. Students in all three M.S. programs may qualify for the Dietetic Internship through coursework for the M.S. degrees and the completion of additional academic prerequisites and requirements specifically for the Dietetic Internship. All three M.S. Nutrition degrees require the following core courses:

- HBSV 4010 Food, nutrition, and behavior


# Health AND BEHAVIOR STUDIES 

- HBSV 4013 Nutritional ecology
- HBSV 4014 Community nutrition
- HBSV 5010 Advanced nutrition I
- HBSV 5011 Advanced nutrition II
- HBSV 5013 Strategies for nutrition education and health behavior change
- HBSV 5014 Analysis of the current literature and research in nutrition
- HBSV 5015 Nutritional epidemiology
- HBSV 5033- Nutrition care process

HBSV 5034 and medical nutrition therapy I and II

- HBSV 5036 Nutrition counseling
- HBSV 5231 or Extended fieldwork in 5232 or 5233 nutrition and education, nutrition and public health, or applied physiology and nutrition
- BBSR 5582 Research design in movement sciences and education, or
- HBSS 5040 Research methods in health and behavior studies I, or
- HBSS 6100 Measurement and program evaluation

As noted above, all three Master of Science programs require a block of supervised fieldwork as well as a substantial integrative departmental project or thesis. Fieldwork can take place in the New York City area, in other parts of the United States, or in an international setting, depending on the interests of the student. The Dietetic Internship may satisfy the fieldwork experience requirement. Students must also submit a portfolio of their work.

## Nutrition Education:

Students working toward the 41 to 47 -point Master of Science degree in Nutrition Education have the option of electing courses that will especially prepare them to conduct individual and group counseling and patient education or to provide food and nutrition education in community, school, work site, health care, or mass media settings.

In addition to the core curriculum in nutrition science, the behavioral aspects of diet, and nutrition education, students are required to take HBSV 5018, Nutrition and human development, and HBSV 5513, Seminar in nutrition education. They are also required to take at least two electives from a variety of other disciplines in keeping with their own goals and their area of specialization. The degree conforms to the guidelines for the training of Nutrition Education Specialists set forth by the Society for Nutrition Education.

## Nutrition and Public Health:

The Program in Nutrition and Public Health is an approved program of the Association of Faculties of Graduate Programs in Public Health Nutrition. Coursework for the 41 to 47-point Master of Science degree conforms to the recommendations of that association, so that the degree is equivalent to one offered by a school of public health.

In addition to the core in nutrition science and the behavioral sciences, coursework is required in epidemiology, program planning, and public health policy. Students are required to take HBSV 5018 unless previously taken. Other courses in public health are selected to complement the student's previous academic background and work experiences and to take into account the student's interests and career goals.

The Nutrition and Public Health major prepares graduates to take leadership roles in government, community, and public health agencies, carrying out a variety of planning, instructional, and administrative tasks related to health promotion and disease prevention. These include community and individual nutritional assessment and evaluation; program planning and management; coalition building; and participation in multidisciplinary teams to provide programs to meet public health needs or improve the sustainability of food systems.

## Applied Physiology and Nutrition:

The Program in Nutrition and the Program in Applied Physiology offer a joint course of study leading to a 54 to 57 -point Master of Science degree in Applied Physiology and Nutrition (APN). In addition to the core courses in nutrition, students are required to take a core of courses in applied physiology (see section below on APN for more details). The program prepares students to provide individual counseling and group education in nutrition and exercise and to design and implement exercise and nutrition programs in weight control centers, work sites, fitness centers, with Olympic, professional, collegiate, or high school athletic teams as well as health centers, community centers, and hospitals.

## Community Nutrition Education:

The program of study for the 60 -point Master of Education degree in Community Nutrition Education includes additional coursework in advanced nutrition and permits stronger emphases in the behavioral sciences, community assessment and planning, and education. A community-based, research, or other integrative project is required.

## Doctoral Degrees

The Program in Nutrition offers the Doctor of Education (Ed.D.) and the Doctor of Philosophy (Ph.D.) degrees.

## Doctor of Education (Ed.D.)

The Doctor of Education is offered in two areas of specialization: Nutrition Education and Nutrition and Public Health.

With the increasing appreciation of the importance of nutrition for health promotion and disease prevention and the widespread interest in the safety and sustainability of the food system, there is a need for highly qualified nutrition professionals who are able to develop appropriate policies and programs. The two doctoral specializations prepare graduates for a variety of leadership positions in policy-making, education, and administration in schools and colleges/universities, in media organizations, hospitals, the workplace, and in government, community and public health, and other service agencies as well as serve as faculty members in colleges and universities. The program's goal is to turn out graduates capable of (a) initiating needed action and responding positively and creatively to the clearly inevitable changes of the coming decades in the physical, intellectual, and political environments in which the food, health, and educational systems operate and (b) conducting research and evaluation studies using appropriate designs and data collection and analysis methods.

The Nutrition Education specialization focuses on leadership roles in many settings, such as colleges and universities, health promotion and disease prevention programs, voluntary health agencies, government and international agencies, businesses, hospitals, and food advocacy organizations, where they work with individuals, groups and communities, and serve as faculty members, program developers, and evaluation and research specialists.

The Nutrition and Public Health specialization focuses on leadership roles in colleges and universities, and in government, community, health care, and public health agencies, carrying out a variety of tasks related to health promotion and disease prevention. These include community and individual nutritional assessment and evaluation; program planning and management; coalition building; participation in multidisciplinary health teams to provide programs to meet public needs; and conducting research and evaluation studies.

## Admissions Requirements

Admission to the Ed.D. program involves completing the application form available
online, including all regular procedures such as transcripts from all institutions attended, 3 letters of recommendations, GRE scores, personal statement, and a writing sample, which can be a thesis or substantial paper.

## Program of Study

The general requirements for the Doctor of Education include a minimum of 90 graduate credits, of which at least 45 must be taken under Teachers College registration. Overall, students will be expected to develop competence in nutrition science, behavioral science, methods of empirical research and data analysis, critical thinking and analysis, and broad areas of scholarship, in addition to developing special skills and knowledge appropriate to their chosen degree in nutrition education or public health nutrition. Students will also be expected to pass a certification examination, usually after the completion of 60 points and Research Seminar in Nutrition (HBSV 65506551), and to conduct original research that culminates in the production of a dissertation.

Students will be expected to take courses in the following categories:
I. Major field and specialization: 50-60 points
II. Research and evaluation: 12-18 points
III. Broad and basic areas of professional scholarship: 15-24 points

The specific courses selected will depend on the student's particular background, interests and goals. In consultation with a faculty advisor, students should develop a program plan early in their course of study to provide a rational basis for their course selection. (Contact the Program in Nutrition office for more detailed descriptions of the doctoral degree requirements.)

Doctor of Philosophy (Ph.D.)
The increasing prevalence of chronic disease and obesity worldwide has added urgency to the need for qualified researchers trained in understanding the complex interaction of biology, environment, and personal behavior, as well as skilled in the development of interventions to potentially attenuate the rapidly rising rates of obesity and chronic diseases such as diabetes in both adults and children.

The program prepares scholars to conduct research on the critical issues related to:

- determinants of health behaviors related to nutrition and to physical activity;
- relationships among food and nutritionrelated behaviors and health outcomes using techniques of behavioral epidemiology;
- design and implementation of theory-based behavioral nutrition and physical activity interventions
- methodological considerations in the design and evaluation of interventions.

There are three specializations:
Behavioral Nutrition
Nutritional Epidemiology Nutrition and Physical Activity
The graduates from this program will be leaders who will assume professorial and research roles in universities and colleges within departments of nutrition epidemiology, foods and nutrition, and physical activity, as well as assume research roles in centers for research on behavioral aspects of obesity, chronic disease prevention, and health promotion. Thus, the program aims to prepare researchers with basic and applied behavioral skills within an educational context.

## Admission Requirements

Admission to the Ph.D. program involves completing the application form available online or through the Admission Office, including all regular procedures such as transcripts from all institutions attended, 3 letters of recommendations, and writing sample, which can be a thesis, substantial paper, or published article.

The student should have a master's degree in nutrition or a closely related discipline from an accredited institution, along with the necessary prerequisite undergraduate courses in general, organic and biochemistry, nutrition and statistics, and human physiology. Admissions will be based on grades, GRE scores, letters of recommendation, personal statement, and an appropriate match between the applicant's interests, the research work of the Ph.D. faculty, and funding availability. The student should normally have scores of 600 or above on each of the quantitative and verbal components of the general GRE test and 5 or 6 on the analytical component. The student will generally be expected to be full-time and to work on on-going research projects of the faculty.

## Program of Study

The general requirements for the Doctor of Philosophy include a minimum of 75 graduate credits, of which at least 45 must be taken under Teachers College registration.

For the Ph.D., total classroom course requirement is $45-51$ credits, including prior master's degree work, and 24-30 credits (advanced topical seminars, research seminar and dissertation advisement) devoted to research-related courses and activities. Students will also be expected to pass a certification examination and an advanced seminar, and to write a dissertation.

Students will be expected to take courses in the following categories:
I. Core courses: 33 points
II. Courses to develop depth within each specialization: 15-21 points
III. Research preparation: 21-27 points

The specific courses selected will depend on the student's particular background, interests and goals. In consultation with a faculty advisor, students should develop a program plan early in their course of study to provide a rational basis for their course selection.

## Research Training and Apprenticeship

The primary modality for training for Ph.D. students is working with their sponsor in some ongoing research project: Students will work closely with one faculty member on an ongoing research project to gain practical experience in the development of study instruments, intervention protocols, data collection, data management and analysis, manuscript preparation and submission, and presentation of results at relevant scientific meetings. During their first year after completing basic core coursework, students will also participate in two semesterlong part-time internships with other Columbia research labs to gain additional research perspectives. (Contact the Program in Nutrition office for more detailed descriptions of the Ph.D. requirements.)

## COURSES:

## HBSV 4000. Introduction to nutrition:

Facts, fallacies, and trends (3)
Dr. Sporny. (Course is offered to non-majors and to those desiring admission to the Program in Nutrition and to the Dietetic Internship Program.) The course provides an overview of the science of nutrition and its relationship to health promotion and disease prevention. The primary focus is on the essential macro- and micronutrients - their chemical structures, food sources, digestion and absorption, metabolism, storage, and excretion. Students analyze the nutritional quality of their own food intake and develop the knowledge and skills to estimate their daily caloric requirements and nutrient needs using tools such as Dietary Reference Intakes, MyPlate and Dietary Guidelines for Americans.

## HBSV 4010. Food, nutrition, and behavior (3)

Professor Contento. For nonmajors and majors. A study of physiological, psychological, and socio-cultural factors that affect eating behaviors and the development of individual and cultural food patterns. Topics include the chemical senses, why we like sweet, salt, and fat; self-regulation of what and how much we eat; effect of early experiences with food; food and mood; interaction of food and culture through history; eating, cooking, and time use

# Health and Behavior Studies 

trends; meat meanings; psychosocial and cultural factors in food choice.

HBSV 4011. Women and weight, eating problems and body image (2)
Dr. Bernstein and Faculty. An intense, two-week short course held in the summer. This course for students and practitioners examines the psychological, sociological, physiological, and nutritional issues related to weight, eating disorders, body image and cultural messages as they relate to women. Potential interventions are also examined. The issues will be discussed using case material, films, and the current research literature. Taught by a licensed psychologist and a nutritionist.

HBSV 4013. Nutritional ecology (2-3) Dr. Liquori and Professor Gussow. A course for nonmajors and majors. Nutrition and food as viewed from a global, ecological perspective. Topics include food/population problems and food aid, food product development and promotion here and abroad, energy and food relationships, food safety and the changing American diet, organic agriculture and natural food, biotechnology, and other topics as appropriate.

HBSV 4014. Community nutrition (2) Ms. MacKenzie. This course provides an understanding of where and how food and nutrition services are delivered to further the national goal of healthy people in healthy communities and of the roles of nutrition professionals in providing these services. Nutrition services, both private and government-sponsored, will be the primary focus. The course includes 35-40 hours of concurrent field experience. Nutrition students only.

HBSV 4150. Sports nutrition (3) Dr. Dolins. For nonmajors only. A practical course designed to assist health professionals give the most accurate and up-to-date information to active people to help them improve health and performance. Integration of principles of nutrition and exercise physiology and application to exercising individuals. Topics for discussion include energy expenditure, fuel substrate metabolism, specific nutrient needs, hydration, and weight issues for exercising individuals and athletes.

HBSV 4902. Research and independent study in nutrition education (1-8) Faculty. Permission required. Master's degree students undertake research and independent study under the direction of a faculty member.

## Intermediate and Advanced Courses

HBSV 5000. Topics in nutrition I (1-3) Faculty. Review and synthesis of current knowledge on a selected topic related to food and nutrition.

HBSV 5010. Advanced nutrition I (3) Dr. Berk. In-depth review of current knowledge and research on biochemical and physiological aspects of energy metabolism, carbo-
hydrates, lipids and lipid metabolism, and proteins; regulation of intake and impact on health and disease.

HBSV 5011. Advanced nutrition II (3) Dr. Pinto. In-depth review of current knowledge and research on the biochemical and physiological aspects of vitamins, minerals, and phytonutrients; applications to diet.

HBSV 5013. Strategies for nutrition education and health behavior change (3) Professor Contento. Understanding and application of theoretical frameworks from the behavioral sciences and education to design and deliver food and nutrition education and physical activity, promotion to various groups and to facilitate the adoption of healthful behaviors. Includes both didactic and field practice components.

HBSV 5014. Analysis of current literature and research in nutrition (3)
Professor Wolf. Critical examination and evaluation of current controversies and issues in nutrition and food. Topics are reviewed and discussed in depth. Students learn how to analyze the medical and layperson literature concerning such topics as dietary fat and disease, calcium and osteoporosis, fruit/vegetables and cancer, weight loss regimens, supplements and alternative therapies.

HBSV 5015. Nutritional epidemiology (3) Professor Wolf. Study of methods for assessing food and nutrient intake, energy expenditure, and body composition and for evaluating nutritional status of individuals and communities from clinical assessments, dietary intakes, and behavioral evaluation.

HBSV 5018. Nutrition and human development (3)
Dr. Sporny. This course examines the physiologic changes and nutritional needs during pregnancy, fetal development, infancy, childhood, and adolescence. Special attention is paid to promoting positive pregnancy outcomes for both mother and baby, fetal metabolic programming, breast feeding versus formula feeding, introduction of solid foods to infants, preventing and managing food allergies, coping with picky eating, maintaining a healthy feeding relationship between caregiver and child, promoting nutritional health in children and adolescents, and preventing health and dietary problems (including eating disorders) in children and adolescents.

HBSV 5033 and HBSV 5034. Nutrition care process and medical nutrition therapy I and II (3 each) Dr. Sporny. Through this 2 -course sequence, students gain the knowledge, professional attitudes and skills required to effectively assess and manage the nutritional needs of acutely, critically, and chronically ill individuals. Pathophysiology of disease and resultant nutritional implications are examined through a variety of case
studies. The Nutrition Care Process, which includes nutrition screening, assessment, diagnosis, intervention, monitoring and evaluation, is the tool through which students learn evidencebased adaptation of diets and lifestyles in the therapeutic management of disease. All the while, the course provides a medical vocabulary that enables students to communicate with members of a healthcare team.

HBSV 5036. Nutrition counseling (2)
Ms. Mesznik. This course focuses on providing students an understanding of client-centered counseling models and practicing a variety of essential skills: nonverbal, active listening, goal assessment, motivational interviewing, and group counseling. Special fee: $\$ 10$.

HBSV 5231-HBSV 5233. Extended fieldwork in nutrition and education, nutrition and public health, and applied physiology and nutrition
Dr. Sporny. A block of supervised field experience required of all degrees. Fieldwork is taken near completion of coursework.


- HBSV 5231. Nutrition and public health (3)
- HBSV 5232. Nutrition and education (2)
- HBSV 5233. Applied physiology and nutrition (2)

HBSV 5241-5244. Dietetic internship in nutrition
Ms. Costa. Internship in service settings in metropolitan New York, Rockland and Westchester counties, and Southern Connecticut. It includes experiences in clinical nutrition, community nutrition, food service management, and research in dietetics. Cumulative experience totals 1088 hours. Malpractice/personal liability insurance, health insurance, lab coat, and physical exam required.

- HBSV 5241. Dietetic internship Module I (3) Ms. Costa. Special fee: $\$ 150$.
- HBSV 5242. Dietetic internship Module II (3) Ms. Costa. Special fee: $\$ 150$.
- HBSV 5243. Research and independent practice (2) Dr. Koch. Special fee: \$20.
- HBSV 5244. Internship in food service (2)

Ms. Amidor. Special fee: $\$ 20$.

HBSV 5314. Practicum in sports nutrition (1)

Dr. Dolins. This course will provide a practical venue for students to apply the knowledge gained through their academic coursework to the real-life situation of individuals and teams in various sports.

HBSV 5333. Practicum in community service (1-2)
Dr. Koch. Practical experiences in community, food, and nutrition programs.

HBSV 5513. Seminar in nutrition education: Theory and applications (2) Professor Contento. An in-depth examination of the use of current theories and research in the design, implementation, and evaluation of nutrition education interventions. Course is designed to supplement topics covered in HBSV 5013. Required of nutrition education master's and doctoral students. Students may register for more than one semester.

HBSV 5593. Nutrition for exercise and sport (3)
Dr. Dolins. Discussions of interactions between exercise and nutrition as applied to health and fitness. Controversial topics emphasized. Majors in either applied physiology or nutrition are eligible to enroll during their second year of
study. (See also section on the interdisciplinary Applied Physiology and Nutrition degree program in this catalog.)

HBSV 5902. Guided study in nutrition (1-4)
Faculty. Permission required. Opportunity for advanced students to investigate areas of special interest in nutrition.

HBSV 6500-HBSV 6501. Seminar in nutrition (3 per section)
Professors Contento and Wolf. For doctoral and other advanced students. Evaluative discussion of current literature on specific nutrition and food-related topics.

HBSV 6550-HBSV 6551. Research
seminar in nutrition (2-3)
Professors Contento and Wolf. Required of all Ed.M. and Ed.D. candidates. Discussion of current research issues and student projects. Students may register for more than one semester.

HBSV 6902. Research and independent study in nutrition (1-4)
Professors Contento and Wolf. Permission required. Open to matriculated doctoral students. Research and independent study under faculty direction.

HBSV 7502. Dissertation seminar in nutrition (2-3)
Professors Contento and Wolf. Development of doctoral dissertations and presentation of plans for approval.

HBSV 8900. Dissertation advisement in nutrition (0)
Faculty. Advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see catalog on continuous registration for Ed.D. degree.

## APPLIED PHYSIOLOGY AND NUTRITION

Program Coordinators:
Professor Isobel R. Contento (Nutrition)
Professor Carol Garber (Applied Physiology)
Program Office: (212) 678-3950
Email: irc6@columbia.edu
Website: www.tc.edu/hbs/nutrition

## Degree Offered:

APPLIED PHYSIOLOGY AND NUTRITION (APPN)
Master of Science (M.S.)

## Program Description:

The Program in Nutrition and the Program in Applied Physiology (in the Department of Biobehavorial Sciences) offer a joint 53 to 57 - point Master of Science degree program.

There are two main rationales for this program. First, both disciplines are concerned with the theory of energy intake, transformation, and liberation. Second, there are many practical problems that can be more satisfactorily addressed by attending to both nutrition and exercise than by attending to either one alone. Most prominent are health problems such as obesity, cardiovascular disease, diabetes, and osteoporosis.

Health professionals and educators need to know how these two aspects of lifestyle interact in children and adults to enhance health and prevent disease. Another application is to sports performance, physical fitness, and ergonomics. Coaches, athletes, teachers, and work physiologists can profit from an understanding of how nutrition and exercise interact to influence work capacity. To be effective in applying these concepts, professionals must be aware of appropriate educational and behavioral change theory and strategies.

The program prepares students to:

- Provide individual counseling and group instruction in nutrition and exercise.
- Design, implement, and evaluate exercise and nutrition programs in schools, weight control centers, work sites, recreational agencies, sports teams, health centers, and hospitals.
- Evaluate and apply research.


## Special Application Requirements/Information:

This program has ongoing admissions and will review applications throughout the year. Preference in scholarship awards will be for those applicants who meet the College early deadline.

The GRE General Test is required. Acceptable substitutes to the GRE are: GMAT, MCAT and DAT. Prerequisites for admission include a strong academic background, including at least one course each in statistics, general and organic chemistry, introduction to nutrition, human physiology, and biochemistry (the latter three taken within the last five years, in which grades of $B$ or better were earned). The biochemistry course must have at least a onesemester course in organic chemistry as a prerequisite.

## Degree Requirements:

Students take a set of core courses in both nutrition and applied physiology. While the program provides a solid foundation in the scientific basis of nutrition and exercise, it also emphasizes practical applications in all courses. The applied physiology lab courses provide hands-on experience in physiological measurement techniques. The interviewing and assessment courses provide firsthand experience in the collection of nutritional data. Courses in behavioral or educational methods provide insight into how applications are made in clinical or educational settings.

Students participate in fieldwork in some setting that provides services/education in both exercise and sports nutrition, such as work site fitness programs, health promotion projects, sports teams, etc. Such fieldwork develops concrete application skills. Our location in New York City provides ready access to a wide range of field experiences and professional contacts that are helpful in securing employment after graduation.

The Program in Nutrition offers a Dietetic Internship. Students may work concurrently on the requirements for the M.S. degree and the Dietetic Internship. Students must satisfy all academic requirements for the degree award and the Dietetic Internship. Our ADA didactic program advisor will work with students to develop an integrated plan of study and to facilitate the process.

Core Requirements for all M.S. Applied Physiology and Nutrition Majors:

- BBSR 4095-4195 Applied physiology I and lab I
- BBS 5060 Neuromuscular responses and adaptation to exercise
- BBS $5068 \quad$ Brain and behavior I
- BBSR 5095 Exercise and health
- BBSR 5194 Applied physiology lab II
- HBSS 5040 Research methods in health and behavior studies I or
- BBSR 5582 Research design in the movement sciences
- HBSV 4010 Food, nutrition, and behavior
- HBSV 4013 Nutritional ecology
- HBSV 4014 Community nutrition
- HBSV 5010-5011 Advanced nutrition I and II
- HBSV 5013 Strategies for nutrition education and health behavior change
- HBSV 5014 Analysis of current literature and research in nutrition
- HBSV 5015 Nutritional epidemiology
- HBSV 5033-5034 Nutrition care process and medical nutrition therapy I and II
- HBSV 5036 Nutrition counseling
- HBSV 5314 Practicum in sports nutrition
- HBSV 5233 Extended fieldwork in applied physiology and nutrition
- HBSV 5593 Nutrition for exercise and sport


## APPLIED BEHAVIOR ANALYSIS

Program Coordinator:
Professor R. Douglas Greer Email: dgreer3872@aol.com

## Degrees Offered:

APPLIED BEHAVIOR ANALYSIS- DUAL CERTIFICATION (BIRTH TO GRADE 6) (ABAS-DUAL)

Master of Arts (M.A.)
APPLIED BEHAVIOR ANALYSIS (ABAS)
Doctor of Philosophy (Ph.D.)

## DEAF AND HARD OF HEARING

Program Coordinator:
Professor Robert Kretschmer Email: kretschmer@tc.edu

## Degrees Offered:

HEARING IMPAIRMENT (DHEA)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
HEARING IMPAIRMENT- INITIAL CERTIFICATION (DHEA-INIT)
HEARING IMPAIRMENT/EARLY CHILDHOOD EDUCATION. INITIAL DUAL CERTIFICATION (DHEI-DUAL)

HEARING IMPAIRMENT/CHILDHOOD EDUCATIONINITIAL DUAL CERTIFICATION (DHCI-DUAL)

HEARING IMPAIRMENT AND READING SPECIALISTINITIAL DUAL CERTIFICATION (DHRI-DUAL)
HEARING IMPAIRMENT/ADOLESCENCE EDUCATION:
English, Social Studies, Mathematics, Biology, Physics,
Earth Science (DHAE-DUAL)
Master of Education (Ed.M.)

## GUIDANCE AND REHABILITATION (HABL)

Program Coordinator:
Professor Linda Hickson
Email: hickson@tc.edu

## Degree Offered: <br> Master of Arts (M.A.)

## INSTRUCTIONAL PRACTICE IN SPECIAL EDUCATION (INST)

Program Coordinator:
All faculty

## Degree Offered:

Master of Education (Ed.M.)

## INTELLECTUAL DISABILITY/AUTISM

Program Coordinator:
Professor Linda Hickson Email: hickson@tc.edu

## Degrees Offered:

INTELLECTUAL DISABILITY/AUTISM (ITDS)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)
INTELLECTUAL DISABILITY/AUTISM AND CHILDHOOD
EDUCATION-INITIAL DUAL CERTIFICATION (ITDS-DUAL) Master of Arts (M.A.)
INTELLECTUAL DISABILITY/AUTISM AND EARLY CHILDHOOD EDUCATION- INITIAL DUAL CERTIFICATION (ITDE-DUAL)

Master of Education (Ed.M.)
INTELLECTUAL DISABILITY/AUTISM AND CHILDHOOD
EDUCATION- INITIAL DUAL CERTIFICATION (ITDC-DUAL) Master of Education (Ed.M.)
INTELLECTUAL DISABILITY/AUTISM AND CHILDHOOD
EDUCATION- TRANSITIONAL B CERTIFICATION (ITDC-TRAN) Master of Arts (M.A.)
INTELLECTUAL DISABILITY/AUTISM ADOLESCENCE-
InITIAL CERTIFICATION (ITDA-IN)
Master of Arts (M.A.)

## PHYSICAL DISABILITIES (PDIS)

Program Coordinator:
Professor Robert Kretschmer

## Degrees Offered:

Doctor of Philosophy (Ph.D.)

## SEVERE OR MULTIPLE DISABILITIES-

ANNOTATION (MULT-ANOT)
Program Coordinator:
Professor Linda Hickson Email: hickson@tc.edu

## Degree Offered:

Master of Arts (M.A.)

## Program Description:

The special education programs at Teachers College build upon a more than 80 -year tradition of leading the field of special education in policy, practice, and research for individuals with disabilities across the age span.

Students who earn M.A., Ed.M., Ed.D., and Ph.D. degrees in special education from Teachers College assume leadership and scholarly positions at all levels of professional activity including public and private schools, community and national service agencies, hospital and rehabilitation programs, colleges and universities, research centers, and local, state, and federal education agencies.

The graduate coursework, independent studies, research projects, and dissertations draw from the following five areas:

- Special education foundations. Includes coursework on theories of process and models of practice, cognitive structure and process, behavioral selectionism and complex behavior, disability constructs, equity and excellence in public policy, psycholinguistics and verbal behavior, and family studies and child development.
- Service delivery systems. Includes administration and supervision, pedagogy, enrichment and acceleration, interdisciplinary programming, communitybased systems change, infancy/early childhood intervention, elementary education, transition and rehabilitation, urban education, and technology.
- Exceptionality areas. Provides coursework in behavioral disorders (e.g., autism, emotional disturbance), blindness and visual impairment, deafness and hearing impairment, intellectual disability/autism, physical disabilities, and multiple handicapping conditions including intellectual disability/ autism coupled with sensory and/or physical disabilities.
- Assessment and intervention strategies. Includes management of social and unsocial behavior, communication and language, mobility, mathematics, reading, problem solving, visual skills and visual perceptual processing, and self-regulation.
- Research and evaluation. Includes applied behavior analysis, experimental research with individuals, group experimental design, program evaluation, ethnography, and postpositivistic inquiry.

In addition to lectures and seminars in the preceding five areas of study, students participate in special projects and complete practicum assignments in a variety of settings, which include the following:

The Dean Hope Center provides learner-centered demonstrations of assessments and evaluations, instructional practices, and follow-up evaluations that promote student-directed learning and performance across settings and time. Special education students work in collaboration with students from school psychology, speech pathology, health, and nutrition, as well as clinical and counseling psychology programs. The Center provides opportunities for practicum experience and research-based demonstrations of effective practice. The Center has an extensive remediation and testing library, testing rooms, observation rooms, and audio and video recording capabilities available for graduate student use.

The Center for Opportunities and Outcomes for People with Disabilities provides support for research, evaluation, and demonstration efforts aimed at increasing opportunities for individuals with special needs to become fully included members of society. The Center provides opportunities for students to participate in research and evaluation projects in such areas as ethnic and cultural differences; language and communication; motivation and verbal behavior; systems of schooling and models of service delivery; inclusion and its social impact; families and siblings; cognition, personality, problem solving, and self-regulated thinking; reading, literacy, and the arts; deci-sion-making and abuse prevention; personnel preparation; social justice and social policy; and self-determination and independence.

Students enrolled in the Program in Applied Behavior Analysis complete their M.A. and Ph.D. internships in schools that meet the research-based and professional accreditation standards for the designation of CABAS® Professional Teaching Schools (e.g., Harlem Children's Zone Promise Academy Schools and Gems Early Intervention, The Fred S. Keller School, for typically developing children and children with autism spectrum disorders 16 months to age 5, Hillcrest School K-2, Alexander Hamilton School grades 3-5 Rockland County district-based classes summer placements in The Jigsaw $\operatorname{CABAS®}$ in Guildford, England. See www.CABAS.com.

Applied Behavior Analysis students do internships simultaneously with their coursework at the university. They spend their days in our professional teaching schools and the evenings in classes at the university. The internships are coordinated closely with the university coursework in behavior analysis.

Students in the M.A. program also complete requirements for and are eligible to apply for CABAS® Board Certification for Teacher I, Teacher II, and Master Teacher Ranks. The
latter is an advanced certification recognizing criterion-referenced expertise in applied behavior analysis and applications with children and youth. Doctoral students who hold the CABAS® Master Teacher Rank complete requirements for and are eligible to submit for CABAS® Board Certification as Assistant, Associate, and Senior Behavior Analyst Ranks.

Doctoral and post-doctoral students with Behavior Analyst Ranks are eligible for CABAS® Board Certification based on their research publication record (i.e., Assistant, Associate, and Senior Research Scientist).

Financial assistance is available to students admitted to the Applied Behavior Analysis program in the form of paid internships at the CABAS® Professional Teaching Schools. Some international internships and training opportunities are available at our CABAS® sites in Europe. Faculty members, students, and CABAS® school professionals associated with the Program in Applied Behavior Analysis are published in numerous journals.

The Department maintains close working relationships with a wide network of public and private schools, agencies, and clinical facilities. Students may participate in field-based activities ranging from the Very Special Arts Festival hosted by the New York City Department of Education and Teachers College to schoolbased practica in a variety of settings.

## Financial Aid

In addition to College-wide financial aid, instructional, research, and administrative internships may be available through the Program in Special Education. The Department collaborates with schools and agencies in the metropolitan area to provide internships. When funds are available, federal traineeships and assistantships are awarded by the program to qualified students. In order to be eligible for a federal traineeship, an applicant must be a United States citizen and be fully admitted to a degree program.

Students are encouraged to apply for all types of financial aid for which they are eligible. Paid internships are available for some students who have been admitted to the Program in Applied Behavior Analysis. The New York City Department of Education has, for a number of years, provided full scholarships for anyone interested in becoming a teacher for individuals who are deaf or hard of hearing.

Endowed fellowships and research assistantships are available to students who are preparing for careers in the education of people with intellectual disability/autism.

## Special Application <br> Requirements/Information:

All applicants: Interviews are required for applicants to the Deaf and Hard of Hearing, and Intellectual Disability/Autism programs. Other program coordinators may arrange for applicants to have an admissions interview.

## M.A. applicants: Experience in special

 education is not a prerequisite for acceptance.Doctoral applicants: Submit an academic or professional writing sample.

## Degree Requirements:

Students may enroll in either M.A. programs or Ed.M. programs designed to prepare them for positions as teachers and clinicians who serve individuals with a full range of abilities and disabilities in a wide array of settings based in schools, communities, and agencies. They specialize in serving individuals with disabilities at specific age levels, from one or more of the above service delivery categories.

Students who gain admission work with a faculty advisor to design a program that meets their interests and fulfills the requirements for a degree in special education with related New York State teacher certification. Candidates for the M.A. degree must complete supervised practica requirements arranged on the Teachers College campus and in schools and agencies in the City. They also must complete an integrative project or, in the case of the Intellectual Disability/Autism Programs, complete a comprehensive examination in addition to the integrative project, prior to award of the degree. In designated programs, master's degree coursework also fulfills the requirements for New York State Certification as a Teacher of Students with Disabilities, Teacher of the Deaf and Hard of Hearing, or General Education Teacher at a specific age level.

In order to meet New York State Certification requirements, which are reciprocal with numerous states throughout the country, the preservice preparation in the Education of the Deaf and Hard of Hearing is a two-year, minimum 60 -point program that leads to dual certification in the education of individuals who are deaf or hard of hearing and regular education either at the preschool, elementary, or secondary level in the areas of mathematics, physics, chemistry, biology, environmental sciences, social studies, or English education. They will earn a Master of Education (Ed.M.) degree upon completion of the program and may be eligible for an M.A. degree. These individuals will be expected to have student teaching experiences with both individuals
who are deaf or hard of hearing and with individuals with hearing.

Two additional options are available: one that certifies students to teach individuals who are deaf or hard of hearing K-12 primarily in the capacity of an itinerant teacher not responsible for subject matter and another as a reading specialist. Both programs are a minimum of 60 points in length. The first option leads to certification as a teacher of the deaf and hard of hearing, $\mathrm{K}-12$, whereas, the second option leads to certification as a teacher of the deaf and hard of hearing and as a reading specialist. Admission to the second option, i.e, the teacher of the deaf and hard of hearing and as a reading specialist, requires prior certification in regular education.

The actual number of credits required may vary slightly depending upon the individual's background and the particular area of dual certification the person is interested in obtaining. Individuals who matriculate into the program and are already certified in regular education will be expected to complete the 45 point core program in the Education of the Deaf and Hard of Hearing, which leads to an M.A. degree. They also have the option to take additional coursework in another area of special education, in the reading specialist program, or another area in order to obtain additional certification and to obtain an Ed.M. degree. These individuals will be expected to complete two full-time student teaching experiences with deaf or hard of hearing individuals and to fulfill additional student teaching or practicum requirements that are needed to obtain the additional certification.

All programs noted above also lead to Council on the Education of the Deaf (CED) certification. Once the student is admitted to the program in the Education of the Deaf and Hard of Hearing, the application is then forwarded to the pertinent area of dual certification, e.g., Curriculum and Teaching, etc., for review. Although admission to the second area of certification is not guaranteed upon admission into the Program in the Education of the Deaf and Hard of Hearing, the probabilities are quite high that such acceptance will be obtained since similar standards are used by the programs involved in the dual certification programs. If for some reason a student were not admitted to the area of secondary certification, the student would still be eligible for the K-12 stand-alone program in the Education of the Deaf and Hard of Hearing that leads to state certification, CED certification, and the M.A. and Ed.M. degrees, assuming all other requirements are met.

## Master's options in the Program in the Education of the Deaf and Hard of Hearing (M.A./Ed.M.)

The Master of Education (Ed.M.) program in Education of the Deaf and Hard of Hearing, which includes an en passant M.A., is designed to meet the needs of individuals seeking initial certification in the education of individuals who are $\mathrm{d} /$ Deaf or hard of hearing. The program has two options: 1) a course of study that leads to pre-K-12 certification as an educator of individuals who are d/Deaf or hard of hearing and 2) a course of study that leads to certification as an educator of individuals who are $\mathrm{d} /$ Deaf or hard of hearing and focuses on a specific age group and/or content domain. The first option prepares students to become certified teachers of individuals who are d/Deaf or hard of hearing throughout the entire school age span from preschool to high school ( $\mathrm{N}-12$ ) or within a specific age range or content domain, for students who already hold a regular education certificate. Students who pursue this option typically function as teachers within resource rooms, itinerant teachers, or classroom consultant teachers. This option also permits those individuals who are already certified as regular education preschool or elementary school teachers or teachers of content material at the middle and secondary levels to teach students who are d /Deaf and hard of hearing at a specific age level or content domain. If an applicant is interested in teaching in an inclusion class, a self-contained classroom, a school for the $\mathrm{d} /$ Deaf or hard of hearing, or a specific content domain but is not yet certified in regular education, that applicant will need to pursue the second program option. The second option leads to dual certification, in early childhood regular education, regular elementary education, or a subject domain (i.e., English, mathematics, social studies, or an area of science) in addition to certification as a teacher of the $\mathrm{d} /$ Deaf or hard of hearing.

All program options require a minimum of 60 credits and take approximately two years to complete. Individualized programs can be developed for individuals with previous academic background in regular education or in the education of individuals who are d /Deaf or hard of hearing and may lead to additional certification. With advisor's approval, coursework taken at the undergraduate level or elsewhere that fulfills any of the certification requirements may result in a waiver of such coursework at Teachers College. However, even with a waiver, the program would still require completion of 60 credits.

## Breadth Requirements:

In order to broaden the student's background in education, three Teachers College courses outside the Teachers College major department

# Health and BEHAVIOR STUDIES 

must be completed (in this case, a course is defined as one for which at least two points are earned). These should be selected from the following areas:

- Age-appropriate developmental psychology course
- Educational foundations course
- Health requirement
- Technology requirement


## Master's options in Intellectual Disability/Autism (M.A. and Ed.M.)

For individuals with an interest in the Intellectual Disability/Autism program area, four master's-level program options leading to initial New York State teacher certification are available: (1) Master of Arts (M.A.) Degree Program in the Teaching of Students with Intellectual Disability/Autism at the Adolescence Level - for individuals who are seeking initial certification as a teacher of students with disabilities at the adolescence/generalist (grades 7-12) level. This 38 -point fulltime program typically requires a year and a half to complete. (2) Master of Arts (M.A.), Degree Program in the Teaching of Students with Intellectual Disability/Autism and Students without Disabilities at the Childhood Level - for individuals who are seeking initial dual certification as a teacher of students with and without disabilities at the childhood/elementary (grades 1-6) level. This integrated 43-point full-time program typically requires a year and a half to complete; (3) Master of Education (Ed.M.), degree program in the Teaching of Students with Intellectual Disability/Autism and Elementary/Childhood for individuals who are seeking initial dual certification as a teacher of students with and without disabilities at the childhood (elementary) level (grades 1-6). This 60 -point fulltime program typically requires two years to complete; (4) Master of Education (Ed.M.), Degree Program in the Teaching of Students with Intellectual Disability/Autism and Early Childhood Education - for individuals who are seeking initial dual certification as a teacher of students with and without disabilities at the early childhood level (birth through grade 2 ). This 60 -point full-time program typically requires two years to complete. All four programs prepare preservice teachers to work with students disabilities in inclusive and specialized settings. Through coursework and practicum experiences, the programs foster the acquisition of the broad-based knowledge and skills needed to provide effective educational programs for students with the full range of learning and behavior characteristics. In addition, the programs provide specialized preparation in working with children with and without Intellectual Disability/Autism at specific age levels.

One additional master's-level programs in the Intellectual Disability/Autism program area leads to New York State Transitional B certification: Master of Arts (M.A.) degree program in the Teaching of Students with Intellectual Disability/Autism at the Childhood level (grades 1-6). This 36-point degree program is restricted to students who have been admitted to the Peace Corps Fellows Program, and it requires participation in the pre-service summer component and in other activities associated with the Peace Corps Fellows Program. An additional track of the M.A. Program in Intellectual Disability/Autism is available through the Teaching Residents at Teachers College program (HYPERLINK "http://www. tc.edu/teachingresidents" www.tc.edu/teachingresidents). To qualify for this option, applicants must be admitted to both the M.A. Program at the adolescence level (ITDA-IN) and to the Teaching Residents at Teachers College program. The program requires participation in intensive summer components and an ongoing integrating seminar, as well as a full school year residency in a high-need New York City school. In addition, students that complete this program are required to teach in a high-need New York City school for three additional years. Please refer to "Teaching Residents at Teachers College."

## Core Departmental Requirements for

 Special Education M.A. Students:- HBSE 4002 Instruction and curriculum for students with and without disabilities
- HBSE 4015 Applied behavior analysis I
- HBSE 4079 Language development and rehabilitation: The foundations
- HBSE 4082 Assessment and evaluation of infants, children, and youth with exceptionalities (Prerequisite for HBSE 4300)
- HBSE 4300

Practicum in assessment and evaluation of individuals with exceptionalities (required for majors in BVIM, ITDS and PDIS)

## Specialization Requirements,

## Applied Behavior Analysis:

- HBSE 4015 Applied behavior analysis I
- HBSE 4016 Applied behavior analysis II
- HBSE 4017 Applied behavior analysis III: School-wide systems applications
- HBSE 4044 Curricular and pedagogical foundations for teaching pre-listening through early academic literacy
- HBSE 4045
- HBSE 4046 Curricular and pedagogical operations for teaching advanced functional academic literacy (4th grade through early middle school) Observation and student teaching in special education: Applied behavioral analysis and behavioral disorders (3 or more terms)


## Breadth Requirement:

(For the list of required courses, contact the program coordinator or the special education secretary.) In order to broaden the student's background in education, three Teachers College courses outside the Teachers College major program (in this case, a course is defined as one for which at least two points are earned), must be completed.

## Specialization Requirements, Deaf and Hard of Hearing:

- HBSE $4070 \quad$ Psychosocial and cultural aspects of people who are d /Deaf or hard of hearing (2 terms)
- HBSE 4071 Special methods: Methods of teaching reading and writing to individuals who are d/Deaf or hard of hearing; and language, reading, and writing instruction in the content areas for individuals who are $\mathrm{d} /$ Deaf or hard of hearing
- HBSE 4072 Development of language of individuals who are d/Deaf or hard of hearing
- HBSE 4073 Audiological principles and the teaching of speech and listening skills to individuals who are d/Deaf and hard of hearing
- HBSE 4074 Linguistics of American Sign Language
- HBSE 4077 Seminar in teacher-asresearcher
- HBSE 4079 Language development and rehabilitation: The foundations
- HBSE 4300 Practicum in assessment and evaluation of individuals with exceptionalities
- HBSE 4707 Observation and student teaching in special education: Deaf and hard of hearing (two terms)
- HBSE 4871 American Sign Language I
- HBSE 4872 American Sign Language II
- Area specialization courses in deaf and hard of hearing ( $15+$ points)

For those individuals who matriculate into the Program in the Education of the Deaf and Hard of Hearing and are not yet certified in a common branch area in regular education,
the students will complete a 60 -point program leading to dual certification and an Ed.M. in education at the preschool, elementary, or secondary level in mathematics, physics, chemistry, biology, environmental sciences, social studies, or English education.

## Breadth Requirements:

In order to broaden the student's background in education, three Teachers College courses outside the Teachers College major department must be completed (in this case, a course is defined as one for which at least two points are earned). These courses should be selected from the following areas:

- Age-appropriate developmental psychology course
- Educational foundations course
- Health requirement
- Technology requirement
- Reading course

Specialization Requirements,
Intellectual Disability/Autism:

- HBSE 4000 Introduction to special education
- HBSE 4001 Teaching students with disabilities in the general education classroom
- HBSE 4005 Applications of technology in special education
- HBSE 4006 Working with families of children with disabilities
- HBSE $4010 \quad$ Nature and needs of persons with intellectual disability/ autism
- HBSE 4011 Education of persons with
- HBSE 4700 Field observation in special education: Pre-student teaching
- HBSE 4701 Observation and student teaching in special education: Intellectual disability/autism (two terms)
- HBSE 4880 Opportunities and outcomes for people with disabilities - Annual conference


## Master of Arts

Severe or Multiple Disabilities
A Master of Arts (M.A.) Program in the Teaching of Students with Severe or Multiple Disabilities is available for individuals who already hold New York State initial certification in the teaching of students with disabilities at the early childhood, childhood, middle childhood, or adolescence age levels; in teaching of students who are blind or visually impaired, deaf or hard of hearing, or who have speech and language disabilities. This 32 -point M.A. program in the Teaching of Students with Severe or Multiple Disabilities leads to a recommendation for an annotation to their

New York State certification, that recognizes additional pedagogical knowledge, skills, and experiences in the teaching of students with severe or multiple disabilities.

## Required Department Courses:

- HBSE 4001

Teaching students with disabilities in the general education classroom

- HBSE 4002 Instruction and curriculum for students with and without disabilities
- HBSE 4005 Application of technology
in special education
- HBSE 4006 Working with families of
- HBSE $4010 \quad$ Nature and needs of persons with intellectual disability/ autism
- HBSE 4011 Education of students with intellectual disability/autism
- HBSE 4015 Applied behavior analysis I
- HBSE 4082 Assessment and evaluation of infants, children, and youth with exceptionalities
- HBSE 4701 Observation and student teaching in special education: Intellectual disability/autism
- HBSE 4880 Opportunities and outcomes for people with disabilities Annual conference


## Master of Arts <br> Guidance and Rehabilitation

The M.A. in Guidance and Rehabilitation, which does not lead to New York State teacher certification, is available to interested students with a broad range of career goals.

## Required Department Courses:

- HBSE 4010 Nature and needs of persons with intellectual disability/autism
- HBSE 4011 Education of persons with intellectual disability/autism
- HBSE 4015 Applied behavior analysis I
- HBSE 4060 Psychosocial implications of vision loss on people with blindness and visual impairment and their families
- HBSE 4070
- HBSE 4071
- HBSE 4082
- HBSE 4880
- HBSE 5309

Psychosocial and cultural aspects of people who are deaf and hard of hearing Special methods: Methods of teaching reading and writing to individuals who are d/Deaf or hard of hearing Assessment and evaluation of infants, children, and youth with exceptionalities
Opportunities and outcomes for people with disabilities Annual conference
Advanced practicum in special education: Rehabilitation of persons with developmental disabilities

- HBSE 5909 Problems in special education: Guidance, rehabilitation, and career education


## Master of Education <br> Instructional Practice in Special Education

Students interested in advanced study in selected areas of special education may seek the Ed.M., which represents a broadening and refinement of knowledge and skills in areas such as those listed above. Award of the Ed.M. requires satisfactory completion of a special project reflecting the attainment of advanced professional competencies.

## Instructional Practice in <br> Special Education

## Core Requirements:

| - HBSE 5010 | Study of the philosophic <br> foundations of special <br> education |
| :--- | :--- |
| - HBSE 6010 | Advanced study of problems <br> and issues in special education |

## Specialization Requirements:

Students work in collaboration with a faculty advisor to select coursework that builds upon their previous professional experiences and increases their current repertoire of skills and knowledge.

## Non-Department Courses Required: <br> - HUDM 4122 Probability and statistical inference <br> - HUDM 5122 Applied regression analysis

## Non-Department Courses Required:

- HUDM 4122 Probability and statistical inference
- HUDM 5122 Applied regression analysis


## Doctor of Education <br> Exceptionality Focus Areas: Deaf and Hard of Hearing Intellectual Disability/Autism

## Professional Specialization Areas: Academic Cognate Instructional Leadership Research and Evaluation

Students of exceptional ability who are interested in and committed to contributing to special education through leadership and scholarly work may apply for the Ed.D. degree, which represents the highest level of achievement in the profession. The doctoral program prepares graduates to assume leadership roles in teacher education programs in colleges and universities in this country and in other coun-
tries, to administer special education programs in schools and agencies, and to conduct research in special education and related services.

Students may focus their work and course of study by exceptionality focus and by professional specialization.

## Doctor of Philosophy

Exceptionality Focus Areas:
Applied Behavior Analysis Intellectual Disability/Autism Physical Disabilities (including Deaf and Hard of Hearing)

## Research and Evaluation Emphasis:

Students with excellent potential as researchers and theoreticians who are interested in scholarly careers in special education, education, and related social sciences may apply for the Ph.D. degree program, which represents the highest level of achievement in the Arts and Sciences. This degree program is administered jointly by Teachers College and the graduate faculty of Columbia University. Prospective students may obtain information on program offerings by contacting the program office.

## Department Courses Required for All Student Majors in Degree Program

Core Requirements for all Ed.D. and Ph.D. Special Education majors:

- HBSE 5010 Study of the philosophic foundations of special education
- HBSE 6001 Research in special education: Research and experimental design
- HBSE 6003 Research in special education:
- HBSE 6005 Qualitative approaches
- HBSE 6005 Research in special education: Single-case experimental designs
- HBSE 6010 Advanced study of problems
and issues in special education
- HBSE 7500 Dissertation seminar in special education
- HBSE 8901-8907 Dissertation advisement in special education


## Specialization Requirements,

Deaf and Hard of Hearing:

- HBSE 5307

Advanced practicum in special education: Deaf and hard of hearing

- HBSE 5907 Problems in special education: Deaf and hard of hearing
- HBSE 6070 Psychology of deafness
- HBSE 6407 Advanced internship in special education: Deaf and hard of hearing
- HBSE 6507

Advanced seminar in special education: Deaf and hard of hearing

- 15 points of work in linguistics and proficiency in two forms of research methodology

Specialization Requirements,
Intellectual Disability/Autism:

- HBSE 5301 Advanced practicum in special education: Intellectual disability/autism
- HBSE 5901 Problems in special education:
- HBSE 6401
- HBSE 6501 Intellectual disability/autism special education: Intellectual disability/autism Advanced seminar in special education: Intellectual disability/autism


## Specialization Requirements, Physical Disabilities: <br> - HBSE 6403 Advanced internship <br> in special education: <br> Physical disabilities

## Specialization Requirements, Applied Behavior Analysis:

Students accepted for the Ph.D. or Ed.D. Programs in Applied Behavior Analysis must complete the core M.A. program requirements in behavior analysis including the internship requirement.

- HBSE 5304
- HBSE 5904
- HBSE 6008
- HBSE 6015
- HBSE 6031
- HBSE 6504

> Advanced practicum in special education: Behavioral disorders

Problems in special education: Applied behavior analysis and behavioral disorders Behaviorism and the science of behavior
The verbal behavior model: Individual educational programming
ngle-case experimental design in education, medicine, and therapy
Advanced seminar in special education: Applied behavior analysis and behavioral disorders (taken each year until approval of dissertation topic)

## Non-Department Courses Required for All Student Majors in Degree Program: <br> - HUDM 4122 Probability and statistical inference <br> - HUDM 5122 Applied regression analysis

## COURSES:

A complete listing of the course offerings in Special Education appears below. Courses required for degree programs generally are given one or more times each year. Specific details regarding scheduled times for particular courses may be obtained by contacting the
program coordinator or by consulting the schedule of classes which is published each semester by the College.

## Foundations, Exceptionalities, and Methods

HBSE 4000. Introduction to special education (2-3)
Professor Chiang and Drs. Lipkowitz, Shamash, and Bae. Offered all terms. Enrollment limited to 25 students. Emphasis is placed on the identification of characteristics of individuals with disabilities and the impact of the characteristics on the learner and family members of the learner. The course is a study of the nature, psychosocial, and educational needs of individuals across the lifespan with physical, mental, emotional, or sensory impairments. Particular attention is placed on the way these special education programs fit, or should fit, into ongoing work in schools. Totally online versions of this course are available for nonHBSE majors in spring and summer A and B terms. Special fee: $\$ 25$.

HBSE 4001. Teaching students with disabilities in the general education classroom (2-3)
Faculty. Problems of educational assessment, curriculum and teaching, organization, and guidance of students with physical, cognitive, affective, and sensory disabilities. Materials fee: $\$ 15$

HBSE 4002. Instruction and curriculum for students with and without disabilities (2-3) Professor Chiang. Curriculum development and research-validated methods of instructing students with and without disabilities from early childhood through adolescence, including methods of teaching reading and mathematics and methods of enrichment and remediation. Materials fee: $\$ 10$.

HBSE 4005. Applications of technology in special education (2)
Dr. Pawelski. This course is intended to provide preservice and in-service special education teachers with basic information on assistive and instructional technology appropriate for use with infants, children and youths who require special education and related services. Materials fee: \$25.

HBSE 4006. Working with families of children with disabilities (2-3)
Ms. Malka. Current and historical perspectives on parent involvement in the special education and empowerment of infants, children, and youth with exceptionalities and their families. Emphasis on strategies and materials to facilitate a continuum of parent and family participation to strengthen the relationships between home, school, and the community. Students are trained in conflict resolution and must perform a minimum of 15 hours of respite to a family with a child with an exceptionality. Special fee: $\$ 15$.

HBSE 4008. Disability: Reconsidered and reconstructed (2-3)
Faculty. The course introduces students to the study of disability as social construct framed within a reconstructivistic context that challenges current theoretical and practical approaches and incorporates individual, interpersonal, educational, and organizational perspectives. Special fee: $\$ 10$.

HBSE 4010. Nature and needs of persons with intellectual disability/autism (2-3) Professor Hickson. Characteristics of persons manifesting different degrees of intellectual disability/autism and other developmental disabilities from early childhood through adolescence. The course emphasizes implications for educational programming, curriculum, and instruction. Materials fee: $\$ 10$.

HBSE 4011. Education of persons with intellectual disability/autism (2-3) Professor Chiang. Curriculum development and research-validated methods of instructing students with intellectual disability/autism and other developmental disabilities from early childhood through adolescence across ability levels. Materials fee: $\$ 20$.

## HBSE 4015. Applied behavior analysis I

 (2-3)Professor Greer. Basic applications for learners without reading or writing repertoires. Strategic applications of the science of behavior to instruction, management, curriculum-based assessment, isolation of locus of learning/behavior problems, and measurably effective instructional practices.

## HBSE 4016. Applied behavior analysis II

 (3)Professor Greer. Prerequisite: HBSE 4015.
Advanced applications to learners with writing, reading, and self-editing repertoires. Teaching operations and curricula designed to teach academic literacy, self-management, and problem solving. Data-based applications required. Special fee: $\$ 15$.

HBSE 4017. Applied behavior analysis III: School-wide systems applications (3) Professor Greer. Applications of behavior analysis to the schooling system that incorporates educating and working with families, providing classroom and school leadership, coordinating support personnel efforts across the school and home, and the development of learner independence through advanced scientifically based pedagogy and functional curriculum design, including computer-based instruction.

HBSE 4031. Education of students with physical disabilities (2-3)
Dr. Pawelski. Curriculum development and research-validated methods of instructing students with physical disabilities from early childhood through adolescence in regular classes, special classes, hospitals, and home instruction.

HBSE 4044. Curricular and pedagogical foundations for teaching pre-listening through early academic literacy (2) Professor Ross. Pedagogical and curricular design repertoires for realizing state educational objectives for children from pre-listener to early reader skills (NYSED Standards, English Excellence in Education Standards, and CABAS® Standards Preschool through Kindergarten). Permission required for non-majors.

## HBSE 4045. Curricular and pedagogical

 operations for teaching the foundations of functional academic literacy (2) Professor Ross. Pedagogical and curricular repertoires for realizing state educational objectives for children with early to advanced self-editing and self-management repertoires (grades 1 through 3). Materials fee: $\$ 10$. Permission required for non-majors.HBSE 4046. Curricular and pedagogical operations for teaching advanced functional academic literacy (4th grade through early middle school) (2)
Professor Ross. Pedagogical and curricular repertoires for realizing state educational objectives for children with early to advanced self-editing and self-management repertoires (grades 4 through middle school). Permission required for non-majors.

HBSE 4070. Psychosocial and cultural aspects of people who are d/Deaf or hard of hearing (2)
Professor Rosen. Introduction to the education of children, youth, and adults who are deaf or hard of hearing; historical development; psychosocial and cultural aspects; problems and issues of the field. Materials fee: $\$ 10$.

HBSE 4071. Special methods: Methods of teaching reading and writing to individuals who are d/Deaf or hard of hearing (2-3) Ms. Hartman. Study of special methods of teaching in programs for children and youth who are deaf or hard of hearing at nursery, elementary, and secondary levels, with particular attention to the development of language within the language arts subject areas. Materials fee: $\$ 10$.

HBSE 4072. Development of language for individuals who are d/Deaf or hard of hearing (2-3)
Ms. Hartman. Language development of deaf or hard of hearing individuals at different maturational levels. Prerequisite: HBSE 4079 or equivalent.

HBSE 4073. Audiological principles and the teaching of speech and listening skills to individuals who are d/Deaf or hard of hearing (2-3)
Ms. Veyvoda. Development of speech in children who are deaf or hard of hearing, methods of teaching speech to children who are deaf or hard of hearing, development of educational programs for the maximum utilization of residual hearing. Lab required. Materials fee: $\$ 10$.

HBSE 4074. Linguistics of American Sign Language (2-3)
Professor Kretschmer. An in-depth study of the phonology, morphology, syntax, and pragmatics of American Sign Language. Aspects of the psycho- and socio-linguistics of this language are covered.

## HBSE 4077. Seminar in teacher-as-

 researcher (2)Professor Kretschmer. Students are oriented to the role of teacher-as-researcher, in terms of classroom-based inquiry, and they begin designing their master's projects. Additionally, students are expected to translate basic research in the area of language acquisition, reading, syntax, semantics, discourse processes, and/or pragmatics into classroom pedagogy and research.

HBSE 4079. Language development and rehabilitation: The foundations (2) Professor Kretschmer. Course designed to establish a firm foundation in generative syntax, semantics, and pragmatics as it relates to language development and rehabilitation. Materials fee: $\$ 10$.

HBSE 4082. Assessment and evaluation of infants, children, and youth with exceptionalities (2-3)
Dr. Cox. Enrollment limited to 20 per term. An in-depth study of theoretical principles of measurement, assessment, and evaluation necessary for appropriate identification of needs as related to implementation of educational plans for infants, children, and youth with disabilities. Applications of assessment data in instructional programs for children with disabilities. Students complete approximately 50 hours of assessments and evaluations of infants, children, youths, and young adults with disabilities, as part of the course, through work in the Dean Hope Center and the Harlem Tutoring Program. Special fee: $\$ 150$. Students participate in an additional, weekly lab session.

HBSE 4083. Theory and techniques for educating infants, children, and youth with sensory impairments (2-3)
Faculty. Discussion of diagnostic theories for teaching infants, children, and youth with multiple sensory impairments; sensory motor, cognitive, language, and adaptive skills development delays. Particular emphasis is focused on designing curriculum that is applicable and appropriate for promoting literacy, communication, and mathematical skills for these unique populations given their mode and codes of learning. Students complete assignments utilizing the various team approaches, including familial involvement. Materials fee: $\$ 30$.

HBSE 4092. Introduction to foundations of special education opportunity (2-3)
Faculty. Theory and practice in the rehabilitation and redress of human relationships affecting people with disabilities across the lifespan. Materials fee: $\$ 10$.

## Health and Behavior Studies

HBSE 4300. Practicum in assessment and evaluation of individuals with exceptionalities (2-3)
Dr. Cox. Supervisors affiliated with the Dean Hope Center. Permission required. Prerequisite: HBSE 4082. Participation in interdisciplinary, psychoeducational assessment of exceptional children. Analysis of observational and test data; formulation of educational programs for exceptional learners. Conducted in the Dean Hope Center or in appropriate community facilities. Course meets the equivalent of one full day a week. Supervisory fee: $\$ 100$ and lab fee: $\$ 150$. (Plus additional lab time).

HBSE 4700-HBSE 4711. Observation and student teaching in special education Faculty. Permission required. Course requires $3-5$ days a week for participation in community, school, and agency programs and a weekly seminar on campus.

- HBSE 4700. Field observation in special education: Pre-student teaching (2-3)
- HBSE 4701. Intellectual disability/ autism (3)
- HBSE 4703. Physical disabilities (3)
- HBSE 4704. Applied behavioral analysis and behavioral disorders (2-3)
- HBSE 4706. Blindness and visual impairment (1 or 3) Special fee: $\$ 20$
- HBSE 4707. Deaf and hard of hearing ( 2 or 4)
- HBSE 4709. Rehabilitation (3)
- HBSE 4710. Intellectual disability/ sensory impairment (3)
- HBSE 4711. ASL and Deaf community and culture (3)

HBSE 4871. American Sign Language I (1-2)
Faculty. A course designed to develop beginning receptive and expressive skills in American Sign Language.

HBSE 4872. American Sign Language II (1-2)
Faculty. A course designed to develop intermediate receptive and expressive skills in American Sign Language.

HBSE 4880. Opportunities and outcomes for people with disabilities- Annual conference (1-2)
Professor Hickson and Dr. Pawelski. Research conference sponsored by the Center for Opportunities and Outcomes for People with Disabilities provides a forum for the presentation and discussion of research findings by Center researchers and their colleagues from the field.

HBSE 4881. Opportunities and outcomes for people with disabilities- colloquium (0-1) Professor Hickson. Biweekly research colloquia sponsored by the Center for Opportunities and Outcomes for People with Disabilities provides a forum for the presentation and discussion of research findings by Center researchers and their colleagues from the field.

HBSE 4901. Research and independent study: Special education (1-6)
Faculty. Permission required.
HBSE 5010. Study of the philosophic foundations of special education (3) Professor Kretschmer. Permission required. For post-master's and advanced master's students in the Department of Health and Behavior Studies in special education. Overview of major philosophic orientation within social sciences and special education. Special fee: $\$ 10$.

HBSE 5062. Orientation and mobility (2-3) Ms. Saunders. Blindness and Visual Impairment majors must enroll for 3 points. Principles and practices of orientation and mobility with primary emphasis on training for people with blindness and visual impairments. Development of self-concept, environmental awareness, and orientation to the environment from infancy through adolescence. Study of validated mobility techniques. Practice of techniques under conditions simulating blindness; observations and practice in preparing and presenting material. Materials fee: $\$ 40$.

HBSE 5063. Technological aids and assistive devices in the education of toddlers, children, and youth with disabilities (2-3) Dr. Gardner. Technological aids and devices used in the education of toddlers, children, and youth with disabilities, including those with cognitive-based disabilities, sensory impairments, and multiple handicapping conditions. Field trips, demonstrations, and laboratory sessions. Laboratory fee: $\$ 150$.

HBSE 5301-5414. Advanced practica in special education
Permission required. Guided experiences in selected special education programs for advanced students. Weekly seminar meetings. Supervised group field visits. Preservice internships arranged. Students submit reports analyzing experiences.

- HBSE 5301. Intellectual disability/autism (1-6)
Professor Hickson.
- HBSE 5304. Behavioral disorders (1-6)
Professor Greer.
- HBSE 5307. Deaf and hard of hearing (1-6)
Professor Kretschmer.
- HBSE 5309. Rehabilitation of persons with developmental disabilities (1-6)
Professor Hickson.
- HBSE 5310. Policy and administration (1-6) Dr. Kelly. Letter grade ( 6 points for full-year continuous enrollment required).
- HBSE 5312. Research (1-6)

Faculty.

- HBSE 5314. Behavior analysis and instruction (1-6) Professor Greer.

HBSE 5901-HBSE 5915. Problems in special education
Permission required. Qualified students work individually or in small groups under guidance on practical research problems. Proposed work must be outlined prior to registration; final written report required.

- HBSE 5901. Intellectual disability/ autism (1-4)
Professor Hickson.
- HBSE 5904. Applied behavior analyses and behavioral disorders (1-4) Professor Greer.
- HBSE 5907. Deaf and hard of hearing (1-4)
Professor Kretschmer.
- HBSE 5909. Guidance, rehabilitation, and career education (1-4) Professors Hickson.
- HBSE 5910. Policy and administration (1-4)
Faculty.
- HBSE 5912. Research (1-4) Faculty.
- HBSE 5914. Behavior analysis (1-4) Professor Greer.
- HBSE 5915. Supervision and administration of special education and human resource agencies through organizational behavior analysis (1-4) Professor Greer.

HBSE 6001, 6003, 6005. Research in special education
Faculty. Permission required. Prerequisites: HUDM 4122 and HUDM 4123. Instruction in the development, conduct, and reporting of research. Student research studies. All doctoral students in Special Education in Health and Behavior Studies must take all courses in this sequence which are as follows: HBSE 6001 (2) - Research and experimental design, HBSE 6003(2) Qualitative approaches, and HBSE 6005 (2) Single case experimental designs. Special fee: $\$ 30$ per course.

HBSE 6002. Administration of special education programs (2-3)
Faculty. For post-master's special educators. Prerequisite: basic courses in school administration and experience in special education. Foundations of leadership and management of special education programs.

HBSE 6004. Public policy and administration in special education (3) Faculty. Provides analytic perspective to assess special education policies and practices within the social and economic contexts that affect immediate and long-term expectations, opportunities, and outcomes for persons with disabilities.

HBSE 6008. Behaviorism and the science of behavior (3)
Professor Greer. Permission required (for Ph.D. students in Applied Behavior Analysis and Behavior Disorders). A survey comparing and contrasting the various behaviorisms including: methodological behaviorism, paradigmatic behaviorism, interbehaviorism, social behaviorism, radical behaviorism, behavior selection, and the relationship of these to pragmatism, natural selection, positivism, and their historical roots of behavior selection and natural selection in the Scottish enlightenment.

HBSE 6010. Advanced study of problems and issues in special education (3) Professor Cummins. Permission required. Required of doctoral students in Special Education in the Department of Health and Behavior Studies. Design and appraisal of current practices and policies in the education of exceptional children and adults.

HBSE 6015. The verbal behavior model: Individual educational programming (3) Professor Greer. Prerequisites: HBSE 4015 and HBSE 4043. Students will master Skinner's model of communicative behavior, the associated literature, and major theoretical papers. Research and data-based schooling applications of the model will be made to pedagogy and curriculum.

HBSE 6031. Single-case experimental design in education, medicine, and therapy (3)

Professor Greer. Permission required. Course covers inter-subject and intra-subject designs, repeated measurement, generality, relevant statistical techniques, direct and systematic replication, and selection of group or single case designs. Offered once every three years.

HBSE 6070. Psychology of deafness (2) Professor Kretschmer. Permission required. Effects of deafness on intellectual and personality development. Social psychology of deafness. Implications for education.

HBSE 6401-HBSE 6412. Advanced internships in special education.
Permission required. Post-master's level. Intensive in-service internship at agency
chosen to meet individual student's needs. Students submit reports analyzing experiences.

- HBSE 6401. Intellectual
disability/autism (1-6)
Professor Hickson.
- HBSE 6403. Physical disabilities (1-6) Professor Kretschmer.
- HBSE 6404. Behavioral disorders (1-6) Professor Greer.
- HBSE 6407. Deaf and hard of hearing (1-6)
Professor Kretschmer.
- HBSE 6409. Guidance, rehabilitation, and career education (1-6) Professors Hickson.
- HBSE 6410. Policy and administration (1-3) Dr. Kelly. (4 points for full-year continuous enrollment required)
- HBSE 6412. Research (1-6)

Professor Hickson.
HBSE 6501-HBSE 6510. Advanced semi-
nars in special education.
Permission required. For doctoral students in special education and related fields. Recent developments in theory and research as related to the specialization from psychological, educational, sociological, and/or medical sources.

- HBSE 6501. Intellectual disability/ autism (1-3)
Professor Hickson.
- HBSE 6504. Applied behavior analysis and behavioral disorders (3) Professor Greer.
- HBSE 6507. Deaf and hard of hear ing (2)
Professor Kretschmer.
- HBSE 6509. Guidance, rehabilitation, and career education (1-6) Professor Hickson.
- HBSE 6510. Policy and administration (3)
Faculty.
- HBSE 6901. Research and independent study: Special education (1-8) Faculty. Permission required.

HBSE 7500. Dissertation seminar in special education (2-3)
Faculty (fall). Permission required. Only advanced doctoral students in special education programs are eligible. Prerequisites: HBSE 5010, HBSE 6001, and HBSE 6010. Development of doctoral dissertations and presentation of plans for approval. Special fee: $\$ 10$.

HBSE 8901-HBSE 8907. Dissertation advisement in special education (0) Advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see catalog on continuous registration for Ed.D./Ph.D. degrees.

- HBSE 8901. Intellectual disability/ autism (0)
Professor Hickson.
- HBSE 8903. Physical disabilities (0) Faculty.
- HBSE 8904. Behavioral disorders (0) Professor Greer.
- HBSE 8907. Deaf and hard of hearing ( 0 )
Professor Kretschmer.


## Health and Behavior Studies

## TEACHING OF AMERICAN SIGN LANGUAGE (ASL) AS A FOREIGN LANGUAGE

## Program Coordinator:

Professor Russell S. Rosen
Program Office: (212) 678-3813 TTY or (212) $678-3880 \mathrm{~V}$

Email:
rrosen@tc.edu
Website: www.tc.edu/hbs/ASL

## Degree Offered:

TEACHING OF AMERICAN SIGN LANGUAGE (ASL) AS A FOREIGN LANGUAGE-
InITIAL CERTIFICATION (ASLN-INIT)
Master of Arts (M.A.)

## Program Description:

The M.A. program in the Teaching of American Sign Language (ASL) as a Foreign Language provides students with foundations in linguistics and applied linguistics; anthropology; sociolinguistics; social and cognitive psychology; academic assessment, second language instructional design, curriculum development, and assessment; and research methodology, as they pertain to the language, community, and culture of persons who are Deaf or hard of hearing.

ASL is a naturally developing language of Deaf and many hard of hearing people in the United States, possessing a linguistic system with its own phonological, morphological, syntactic, and discourse structures that are distinct from English language. ASL users have developed a literary tradition in oratory, folklore, and performance art, all recorded either in print or in permanent media like film and video. The American Deaf community of persons, groups, and organizations provides the basis for cultural identity and group cohesion for about one million Deaf, hard of hearing, and hearing individuals, who share a set of characteristics that bind them together, such as knowledge of ASL and traditions for social behavior.

ASL has been afforded the status of a foreign language, and it can be pedagogically approached with individuals unfamiliar with it in a manner similar to other foreign languages. Students in the program will be practiced in curriculum design and execution in general and the curriculum principles found in Modern Languages for Communication as a model. Students will be prepared to become professionals who approach the profession of teaching ASL as a foreign language in a highly scholarly manner and as a contextualized,
investigatory, cultural, and problem-solving event with learners who typically have hearing, are in regular education programs and possess a wide range of cognitive, social, and academic abilities and diverse cultural backgrounds. They will be able to consume, apply, and generate research on the instructional process as presented formally within journals and texts on the teaching of ASL and other second languages, communication skills, Deaf studies, curriculum design, and the cognitive, social and affective development of the learner.

## Special Application <br> Requirements/Information:

The M.A. program in the Teaching of American Sign Language has ongoing admissions, and applications are received and reviewed throughout the year. Preference in scholarship awards will be for those applicants who meet the College early deadline. In addition to general College admission requirements, the Program has two additional requirements: demonstrated proficiency in American Sign Language and an interview with the program coordinators. Proficiency in ASL at the Advanced Level is required for graduation; students need to bring documentation such as SCPI and ASLPI. Students who are not proficient in ASL at this level as measured by nationally recognized assessments may need to take additional conversational ASL courses. An interview may be scheduled by contacting the program coordinator.

## Degree Requirements:

The Master of Arts program in the Teaching of ASL consists of a minimum of 45 points distributed in the following manner: 13 points of coursework on professional foundations, 30 points of coursework and practica experiences in the area of ASL and Deaf studies, and 2 points of electives. Students not proficient in ASL will be expected to take additional coursework to develop the necessary level of proficiency expected.

The students will enroll in two semesters of student teaching and practicum experience associated with coursework. Students will participate in introductory field observations and student teaching for five days weekly with 400 hours of practicum experiences, divisible into two semesters, with 100 hours of observation and 100 hours of student teaching each semester. Before student teaching, students need to take a sign competency assessment test and attain an advanced rating.

In addition, the students would need to identify pertinent issues of ASL teaching and/or deaf studies, embark on a review of literature, formulate research questions and hypotheses, conduct data collection and analysis, and pre-
pare an M.A. Project. As for the final master's research paper, it will be completed during the final student teaching placement. The topics will be decided upon jointly by the student and the program coordinators, with input from the master cooperating teacher, and should arise out of some classroom concern. Students who successfully complete the master's program and meet all of the requirements for state certification will be recommended to the New York State Education Department for certification as a Teacher of American Sign Language. They will also be able to obtain a national certificate from the American Sign Language Teachers Association.

## COURSES REQUIRED:

## Foundation (13 points):

## Curriculum Design:

- C\&T 4052 Designing curriculum and instruction (2)

Pedagogy:

- C\&T $4005 \quad$ Principles of teaching and learning (3 or 4)

Learning Process:

- HUDK 4029 Human cognition and learning (3)

Anthropological Foundations:

- ITSF $4010 \quad$ Cultural and social bases of education (3)
- ITSF $5003 \quad$ or $\quad$ Communication and culture (3)
- A\&HH 4070 History of education in
- ITSF 4011 the United States (3)
- ITSF 4011 Social context of education (3)

Learner Characteristics:

- HUDK 4023 Developmental psychology: Adolescence (3)


## Specialization (32 points):

Deaf Community and Culture (8):

- HBSE 4070 Psychosocial and cultural aspects of people who are deaf or hard of hearing, (two terms)
- HBSE 4075-4078 Selected topics in ASL and Deaf community and culture (two terms)

Language and Communication (8):

- A\&HL 4087 Introduction to second language acquisition
- HBSE 4074 Linguistics of American - HBSE 4079 Sign Language
- HBSE 4079 Language development and rehabilitation: The foundations
- HBSE 4871-4872 American Sign Language I \& II

Curriculum and | Instruction (5): |
| :--- |
| - HBSE 4076 |
| Methods and materials in |
| teaching ASL and Deaf |

community and culture

Assessment (3):

- HBSE 4307 Assessment in ASL and Deaf community and culture

Student Teaching/Practica (6):

- HBSE 4711 Observation and student teaching in special education: ASL and Deaf community and culture of ASL (two terms)

Electives (2):

- A\&HE 4050 Literature and teaching or
- MSTU 5191 Educational video production


## COURSES:

Other courses in the Program are described elsewhere. The following are courses specific to the Program.

HBSE 4075. Selected topics: Deaf and ASL arts and literature (2)
Professor Rosen. This course is a study of the deaf experience as presented in artistic and literary works by deaf and hard of hearing individuals. Principles of literary analysis and criticism will be presented. Students will analyze the works using principles of literary theory and criticism. Offered on alternate years.

HBSE 4076. Methods and materials in teaching ASL and Deaf community and culture (3)
Professor Rosen. Current theories and approaches in curriculum design and instructional methods in second language acquisition and the teaching and learning of American Sign Language and Deaf community and culture will be discussed. Materials on American Sign Language and American Deaf community and culture will be introduced. Students will develop curriculum and instructional methods to apply current approaches to classroom practice.

HBSE 4078. Selected topics: Second language acquisition of ASL (2) Professor Rosen. This course deals with the acquisition of ASL by second language learners. Theories and methods in second language acquisition will be given. Studies in the second language acquisition of ASL will be discussed. Students will conduct research on the SLA of ASL. Offered on alternate years.

HBSE 4307. Assessment in American Sign Language and Deaf community and culture (3)
Professor Rosen. Models of assessment in American Sign Language and Deaf community and culture will be discussed and evaluated. Students will select appropriate assessment procedures based on reasons for assessment and will construct a complete plan for assessment.

# Human Development 

## PROGRAMS:

## COGNITIVE STUDIES

IN EDUCATION.
Educational Psychology:
Cognitive, Behavioral and
Developmental Analysis
Cognitive Studies in Education
DEVELOPMENTAL
PSYCHOLOGY
Psychology: Developmental
Developmental Psychology
MEASUREMENT, EVALUATION,
AND STATISTICS
Applied Statistics
Measurement and Evaluation


## DEPARTMENTAL MISSION:

The Department of Human Development is devoted to promoting an understanding of human development in families, schools, and institutions across the lifespan. The department provides social scientists and educators with theories, empirical methods, and analytical tools for understanding and conducting research in human development and cognition and for helping solve educational and psychological problems.

## FACULTY:

## PROFESSORS:

John B. Black
(Cognitive Studies in Education/
Instructional Technology and Media)
Jeanne Brooks-Gunn
(Developmental Psychology)
James E. Corter
(Measurement, Evaluation, and
Statistics/Cognitive Studies in Education)
Herbert P. Ginsburg
(Developmental Psychology/
Cognitive Studies in Education)
Deanna Kuhn
(Developmental Psychology/
Cognitive Studies in Education)
Suniya S. Luthar
(Developmental Psychology/
Clinical Psychology)
Gary Natriello
(Cognitive Studies in Education/
Developmental Psychology)
Barbara G. Tversky
(Cognitive Studies in Education)
Joanna P. Williams
(Cognitive Studies in Education)

## ADJUNCT PROFESSORS:

Hugh F. Cline
(Sociology and Education)
Judith Miller
(Developmental Psychology)

## ASSOCIATE PROFESSORS:

Lawrence T. DeCarlo
(Measurement, Evaluation, and
Statistics/Cognitive Studies in Education)
Peter Gordon
(Developmental Psychology/
Speech-Language Pathology)
Matthew S. Johnson
(Measurement, Evaluation, and Statistics)
Young-Sun Lee
(Measurement, Evaluation, and Statistics)

## ADJUNCT ASSOCIATE PROFESSORS:

Joseph R. Lao
(Developmental Psychology)
Mercè Pujol
(Cognitive Studies in Education)

## ASSISTANT PROFESSOR:

Elizabeth Tipton
(Measurement, Evaluation, and Statistics)

## LECTURER:

Anastasios Markitsis
(Measurement, Evaluation, and Statistics)
ADJUNCT ASSISTANT PROFESSORS:
Nabeel Ahmad
(Cognitive Studies in Education)
Michael J. Dean
(Measurement, Evaluation, and Statistics) David Guralnick
(Cognitive Studies in Education)
Alyse C. Hachey
(Cognitive Studies in Education)
Michael Hanchett Hanson
(Developmental Psychology/
Cognitive Studies in Education)
William E. Hixson
(Cognitive Studies in Education)
Susan Jang
(Cognitive Studies in Education)
YoungKoung Kim
(Measurement, Evaluation, and Statistics)
Sari Locker
(Developmental Psychology)
Dominic Mentor
(Cognitive Studies in Education)
David E. Shaenfield
(Cognitive Studies in Education)
Lisa Tsuei
(Cognitive Studies in Education)
Doris C. Zahner
(Measurement, Evaluation, and Statistics)
For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit us at www.tc.edu/faculty.

## COGNITIVE STUDIES IN EDUCATION

Program Coordinator:
Professor John B. Black
Program Office: (212) 678-4190
Email: black@tc.edu
Website: www.tc.edu/hud/Cognition

## Degrees Offered:

COGNITIVE STUDIES IN EDUCATION (COGN)
Master of Arts (M.A.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)
EDUCATIONAL PSYCHOLOGY: COGNITIVE, BEHAVIORAL, AND DEVELOPMENTAL ANALYSIS (COGF)
Master of Education (Ed.M.)

## Program Descriptions:

In Cognitive Studies in Education, students examine the cognitive mechanisms that underlie learning and thinking in school and non-school settings. The program trains students in basic theories of human cognition, the practice and interpretation of empirical cognitive and developmental research, and how to use research to improve educational practices and develop innovative methods built around new technologies. Studies in cognitive, developmental and educational psychology, and computer science provide students with a valuable perspective on cognition and learning.

The curriculum and program requirements are designed to prepare graduates for careers in several possible settings. For the master's programs, these settings include:

- Publishers and software companies looking for people with knowledge of cognition and development and experience in instructional design.
- Research organizations seeking people to conduct basic research and work on instructional applications of computers and related technologies.

For the doctoral programs, work settings after graduation might include: research organizations or universities seeking faculty in cognitive psychology, educational psychology, educational technology, and reading.

Students in the Cognitive Studies in Education Program begin by taking a set of core background courses, then pursue one of five concentrations: Cognition and Learning, Intelligent Technologies, Reading Research, Cognitive Studies of Educational Practice, or Creativity and Cognition. Students beyond the M.A. level take more advanced courses, including a statistics sequence.

In addition, students register for research practicum seminars during which they complete a substantive project as a culminating experience for that degree. Choice of advanced courses and research seminars should be shaped by the students' area of concentration, as described below. Students whose interests do not fit one of these tracks may design their own concentration in consultation with their advisor.

- Concentration in Cognition and Learning: The concentration in Cognition and Learning is designed for students interested in theories of human cognition and learning, and experimental approaches to learning, memory, language, reasoning, and problem solving. The culminating experience for master's students in this concentration is to conduct an empirical research study in the area of cognition or learning.
- Concentration in Intelligent Technologies: The Intelligent Technologies concentration offers a program of study for students whose interests include developing cognitive sci-ence-based theoretical frameworks for informing the design of educational technology, as well as for students wishing to create educational applications that serve as test beds for such theoretical frameworks. By offering this concentration, the Program in Cognitive Studies in Education recognizes the importance of computational and allied technologies to both guide and be guided by cognitive research. Many of the courses in this concentration are cross-listed with the programs in Communication, Computing, and Instructional Technology in the Department of Mathematics, Science and Technology. As a culminating experience, master's students in this concentration create and evaluate an educational technology application.
- Concentration in Reading Research: This concentration prepares students to do basic research in reading and theory on all aspects of the psychology of reading, (e.g., basic skills, comprehension, and aesthetic response) in order to improve educational practice. Students address the connections between written and oral language and
between reading and writing skills. Individual differences are also addressed, especially with respect to students with learning disabilities, adult literacy, learning from text and educational policy issues. The culminating experience for master's students is an empirical study in the area of reading.
- Concentration in Cognitive Studies of Educational Practice:
This concentration is for students interested in understanding and facilitating the thinking and learning involved in educational activities. Students will learn about cognitive processes involved in both formal and informal education and how they are influenced by various factors, including classroom structure, teacher belief systems, student motivation, and educational policy. The concentration's focus on understanding cognitive processes and development is designed to help prospective and practicing teachers and other educators improve educational practice. The culminating experience for master's students is an empirical study of cognition in a classroom setting.
- Concentration in Creativity and Cognition: Focusing on the importance, development, and influence of creativity, the concentration in Creativity and Cognition is designed for those interested in creative problem solving and multi-modal thinking as it affects the classroom, curriculum development, community organizations, therapeutic settings, and business. The culminating experience for master's students is an empirical study in the area of creativity.


## Special Application Requirements/Information:

GRE General Test is required for admission to the doctoral programs.

## Degree Requirements:

## Master of Arts-32 points

(Code: COGN)
Core Courses ( 9 points):

- HUDK 4029 Human cognition
- HUDK 4080 Educational psychology (3)
- HUDK 5023 Cognitive development (3)


## Statistics/Research Design (3 points):

At least one of the following:

- HUD 4120 Methods of empirical research (3)
- HUDM 4120 Basic concepts in statistics (3)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)


## HUMAN DEVELOPMENT

- HUDM 5123 Linear models and experimental design (3)


## Research Practicum (3 points):

- HUDK 5324 Research work practicum (2-3) or by permission
- HUDK 6539 Research practicum in educational psychology, cognition, and learning (1-3)


## Breadth Requirement (6-9 points):

(each course must be for at least 2 points) A minimum of three Teachers College courses outside of HUDK are selected in consultation with an advisor

| - A\&HF 4090 | Philosophies <br> of education (3) |
| :--- | :--- |
| - A\&HL 4000 | Introduction <br> to linguistics (3) <br> - BBS 5068-5069 <br> Brain and behavior <br> I and II (1-2 each; total of 3) <br> - BBSQ 4040 |
| Speech and language <br> disorders (2-3) |  |
| - ITSF 4010 | Cultural and social <br> bases of education (3-4) |
| - MSTU 4036 | Hypermedia <br> and education (2-3) |
| - MSTU 4133 | Cognition and computers (3) <br> - ORLJ 4005 |
| Organizational psychology (3) |  |

## Specialized Courses (8-11 points):

Selected in consultation with an advisor, and focusing on one of the following concentrations

Cognition and Learning:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4027 Development of
mathematical thinking (3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5034 Cognitive research methods and applications (3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HUDM 5058 Choice and decision making (3)
- HBSK 5096 The psychology of memory (3)

Intelligent Technologies:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4035 Technology and human development (3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5034 Cognitive research methods and applications (3)
- HUDK 5035 Psychology of media (3)
- HUDK 5039 Design of intelligent learning environments (3)
- HUDK 5198 Psychology of instructional systems design (2-3)
- MSTU $4031 \quad$ Programming I (4)
- MSTU 4083

Cogatiol technology (3)

- MSTU 4133
- MSTU 4134

Reading Research:

- HUDK 5024 Language development (2-3)
- HUDK 5080 Experimental psychology:

Schooling and reading (2-3)

- HUDK 5090 Psychology of language and reading (2-3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)
- MSTU 4086 Text understanding and design (3)

Cognitive Studies of Educational Practice:

- HUDF 4021 Sociology of education (3)
- HUDK 4035 Technology and human development (3)
- HUDK 6620 Special topics in developmental psychology (1-3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)
- ORL 5522 Evaluation methods I (3)

Creativity and Cognition:

- HUDK 5020 Development of creativity (3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5029 Personality development and socialization across the lifespan (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5120 Development of creativity:
- HUDK 5125 The case study method (3)
-HUDK 5125 Cross-cultural developmental psychology (3)

Note: At least 2 courses (minimum of 4 points) must be taken outside the department.

## Integrative Project:

Varies according to selected concentration: Cognition and Learning-an empirical cognitive research study; Intelligent Technologiescreation and evaluation of an educational technology program; Reading Research-an empirical reading research paper; Cognitive Studies of Educational Practice-an empirical study of cognition in a classroom setting; and Creativity and Cognition-an essay or project related to creativity.

## Master of Education-60 points (Code: COGF) <br> Core Courses ( 9 points): <br> - HUDK 4029 Human cognition <br> and learning (3)

- HUDK 4080 Educational psychology (3)
- HUDK 5023 Cognitive development (3)


## Statistics/Research Design

(minimum of 12 points):

- HUD 4120 Methods of empirical research (3)
- HUDM $4120 \quad$ Basic concepts in statistics (3) (if no undergraduate statistics)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5059 Psychological measurement (3)
- HUDM 5122 Applied regression analysis (3)

Research (6 points):

- HUDK 5324 Research work practicum (2-3) or, by permission, a 6000-level research work practicum, minimum of 2 semesters.

Breadth Requirement (9 points):
To satisfy college requirements, all students must complete a minimum of three Teachers College courses (a course for this purpose is one in which at least 2 points are earned) outside of HUDK. Must select at least two of the following:

- A\&HF $4090 \quad$ Philosophies of education (3)
- A\&HL 4000 Introduction to linguistics (3)
- BBS 5068-5069 Brain and behavior I and II (1-2 each; total of 3 )
- BBSQ 4040 Speech and language disorders (2-3)
- ITSF $4010 \quad$ Cultural and social bases of education (3-4)
- MSTU 4008 Information technology and education (3)
- MSTU 4036 Hypermedia and education (2-3)
- MSTU 4133 Cognition and computers (3)
- ORLJ 4005 Organizational psychology (3)


## Specialized Courses ( $24-27$ points):

Selected in consultation with an advisor and focusing on one of the following concentrations:

Cognition and Learning:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4027 Development of math-
- HUDK 5024 Language development (2-3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5034 Cognitive research methods and applications (3)
- HUDK 6620 Special topics in developmental psychology (1-3)
- HUDM 5058 Choice and decision making (3)
- HBSK 5096 The psychology of memory
(3)

Intelligent Technologies:

- HUDK 4035 Technology and human development (3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5039 Design of intelligent
learning environments (3)
- HUDK 5198 Psychology of instructional
- HUDK 6620 Special topics in develop-
- MSTU 4083 mental psychology (1-3)
- MSTU 4083 Instructional design of educational technology (3)

Reading Research:

- HUDK 5024 Language development (2-3)
- HUDK 5080 Experimental psychology:
- HUDK 5000 - Schooling and reading (2-3)
- HUDK $5090 \quad$ Psychology of language
- HUDK 6095 and reading (2-3)
- HUDK 6095 Critical review of current
journals in psychology (3)
mental psychology (1-3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)

Cognitive Studies of Educational Practice:

- HUDF 4021 Sociology of education (3)
- HUDK 4035 Technology and human
- HUDK 6620 Special topics in develop-
- 5 mental psychology (1-3)
- HBSK 4074 Development of reading
- HBSK 5099 comprehension strategies and study skills (3)
Writing interventions theory and practice (3)

Integrative Project: Varies according to selected concentration: Cognition and Learning-an empirical cognitive research study; Intelligent Technologies-creation and evaluation of an educational technology program; Reading Research-an empirical reading research paper; Cognitive Studies of Educational Practicean empirical study of cognition in a classroom setting.

## Doctor of Philosophy- 75 points

(Code: COGN)

## Core Courses ( 9 points):

- HUDK 4029 Human cognition and learning (3)
- HUDK 4080 Educational psychology (3)
- HUDK 5023 Cognitive development (3)

Statistics (12 points):

- HUDM 4120 Basic concepts in statistics (not recommended for those with undergraduate statistics) (3)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and
experimental design (3)


## Specialized Courses (minimum of 15 points):

Selected in consultation with an advisor, and focusing on one of the following concentrations:

Cognition and Learning:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4027 Development of mathematical thinking (3)
- HUDK 5024 Language development (2-3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5034 Cognitive research methods and applications (3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HUDM 5058 Choice and decision making (3)
- HBSK 5096 The psychology of memory (3)

Intelligent Technologies:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4035 Technology and human development (3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5034 Cognitive research methods
- HUDK 5035 Psychology of media (2-3)
- HUDK 5039 Design of intelligent
- HUDK $5198 \quad \begin{aligned} & \text { learning environments (3) } \\ & \text { Psychology of instructional }\end{aligned}$
- 4 systems design (2-3)
- MSTU 4031 Programming I (4)
- MSTU 4083 Instructional design of educational technology (3)
- MSTU 4133 Cognition and computers (3)
- MSTU 4134 Cognition and computers lab (1-3)

Reading Research:

- HUDK 5024 Language development (2-3)
- HUDK 5080 Experimental psychology:
- HUDK 5090 Schooling and reading (2-3)
- HUDK 5090 Psychology of language
- HUDK 6095 Critical review of current
journals in psychology (3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)
- MSTU 4086 Text understanding and design (3)

Cognitive Studies of Educational Practice:

- HUDF 4021 Sociology of education (3)
- HUDK 4035 Technology and human development (3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)
- ORL 5522 Evaluation methods I (3)

Research Apprenticeship (6 points):
Two semesters in a research practicum:

- HUDK 6523 Seminar in cognitive development (3)
- HUDK 6539 Research practicum in educational psychology, cognition, and learning (1-3)

Special Seminars (minimum of 9 points):

- HUDK 6620 Special topics in developmental psychology (1-3) (taken during both first and second years)
- HUDK 7502 Dissertation seminar (1-3)
- HUDK 8901 Dissertation advisement (0)
-TI 8900 Dissertation defense (0)


## Breadth/Foundation Courses (12 Points):

Take one course (minimum of 3 points) in each of the 4 following areas:

1. Biological Basis of Behavior:

- BBS 5068-5069 Brain and behavior I and II (1-2 each)
- BBSN 5033 Human clinical neuropsychology (3)
- MSTC 5000 Neurocognitive models of information processing (1-3)

2. Cognitive Basis of Behavior:

- HUDK 4015 Psychology of thinking (3)
- HUDK 5090 Psychology of language
- HBSK 5096 The psychology of memory (3)
- CCPX 5020 Emotion, culture, and health (3)

3. Social Cultural Factors and Individual Differences:

- HUDK 5029 Personality development and socialization across the lifespan (2-3)
- HUDK 5040 Development and psychopathology: Atypical contexts and populations (2-3)
- HUDK 5121 Personality development and
- HUDK $5125 \quad \begin{aligned} & \text { socialization in childhood (2-3) } \\ & \text { Cross-cultural developmental }\end{aligned}$
$\left.\begin{array}{ll}\text { - ORL 5362 } & \begin{array}{l}\text { Group dynamics: A systems } \\ \text { perspective (3) }\end{array} \\ \text { - CCPX 5034 } & \begin{array}{l}\text { Child psychopathology (3) } \\ \text { - HBSK 5031 }\end{array} \\ \text { Family as a context for } \\ \text { child development (3) }\end{array}\right\}$

4. Measurement:

- HUDM 5059 Psychological measurement (3)


## Non-departmental Courses

 (minimum of 8 points):At least three courses outside the department are selected in consultation with an advisor.

Additional Requirements: Two papers-one an empirical study the student has conducted, another an integrative research literature survey; certification examination; and an approved dissertation.

## Doctor of Education-90 points

(Code: COGN)
Core Courses ( 9 points):

- HUDK $4029 \begin{aligned} & \text { Human cognition } \\ & \text { and learning (3) }\end{aligned}$
- HUDK 4080 Educational psychology (3)
- HUDK 5023 Cognitive development (3)

Statistical and Research Methodology (12 points):

- HUDM 4120 Basic concepts in statistics (not recommended for those with undergraduate statistics) (3)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6122 Multivariate analysis I (3)

Specialized Courses (minimum of 30 points): Selected in consultation with an advisor and focusing on one of the following concentrations:

Cognition and Learning:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4027 Development of mathematical thinking (3)
- HUDK 5024 Language development (2-3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5034 Cognitive research methods and applications (3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HUDM 5058 Choice and decision making (3)
- HBSK 5096 The psychology of memory (3)

Intelligent Technologies:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4035 Technology and human development (3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5034 Cognitive research methods
- HUDK 5035
arnogy of media (3)
- HUDK 5039 Design of intelligent learning environments (3)
- HUDK 5198 Psychology of instructional
- MSTU 4031
- MSTU 4083 Instructional design of educational technology (3)
- MSTU 4133 Cognition and computers (3)
- MSTU 4134 Cognition and computers lab (1-3)

Reading Research:

- HUDK 5024 Language development (2-3)
- HUDK 5080 Experimental psychology:

Schooling and reading (2-3)

- HUDK 5090 Psychology of language and reading (2-3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)
- MSTU 4086 Text understanding and design (3)

Cognitive Studies of Educational Practice:

- HUDF 4021 Sociology of education (3)
- HUDK 4035 Technology and human development (3)
- ORL 5522 Evaluation methods I (3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)

Research Apprenticeship (6 points):
Two semesters in a research practicum:

- HUDK 6523 Seminar in cognitive development (3)
- HUDK 6539 Research practicum in educational psychology, cognition, and learning (1-3)
- HUDK 6592 Advanced research seminar: Learning and instruction (3)

Special Seminars (minimum of 9 points): - HUDK 6620

Special topics in developmental psychology (1-3) (taken fall and spring semesters during both first and second years)

- HUDK 7502 Dissertation seminar (1-3)
- HUDK 8901 Dissertation advisement (0)

Breadth/Foundation Courses (12 Points):
Take one course (minimum of 3 points) in each of the following 4 areas:

1. Biological Basis of Behavior:

- BBS 5068-5069 Brain and behavior I and II (1-2)
- BBSN 5033 Human clinical neuropsychology (3)
- MSTC 5000 Neurocognitive models of information processing (1-3)

2. Cognitive Basis of Behavior:

- HUDK 4015 Psychology of thinking (2-3)
- HUDK 5090 Psychology of language and reading (2-3)
- HBSK 5096 The psychology of memory (3)
- CCPX 5020 Emotion, culture, and health (3)

3. Social Cultural Factors and Individual Differences:

- HUDK 5029 Personality development and socialization across the lifespan (2-3)
- HUDK 5040 Development and psychopathology: Atypical contexts and populations (2-3)
- HUDK 5121 Personality development and socialization in childhood (2-3)
- HUDK 5125 Cross-cultural developmental psychology (2-3)
- CCPX 5034 Child psychopathology (3)
- HBSK 5031 Family as a context for child development (3)
- ORLJ 5017 Small group intervention: Theory and method (2-3)
- ORLJ 5106 Psychological aspects of organizations (2-3)
- ORL 5362 Group dynamics: A systems perspective (3)
- ORLJ 5540 Pro-seminar in social and organizational psychology (2-3)

4. Measurement:

- HUDM 5059 Psychological measurement (3)


## Non-departmental Courses <br> (minimum of 8 points):

At least three courses outside the department are selected in consultation with an advisor.

## Additional Requirements:

Two papers, one in theory and application and one in empirical research; certification examination; and an approved dissertation.

## Basic and General Courses

HUDK 4015. Psychology of thinking (3)
Professor Black. Examines cognitive psychology theories and research about various kinds of thinking, what each kind is best suited for, and problems people have with it. Also examines the best ways of learning from each kind of thinking. Critically examines the various thinking skills curricula that have been proposed.

HUDK 4027. Development of mathematical thinking (3)
Professor Ginsburg. The development of informal and formal mathematical thinking from infancy through childhood with implications for education.

## HUDK 4029. Human cognition and learning (2-3)

Professors Black and Tversky. Cognitive and information-processing approaches to attention, learning, language, memory, and reasoning. Fee: $\$ 20$.

## HUDK 4030. Cognitive clinical interview

 (3)Professor Ginsburg. Introduction to the cognitive clinical interview and exploration of how it has and can be used in psychological and educational research and assessment.

## HUDK 4035. Technology and human development (3)

Professors Black and Tversky. Examines the use and design of various educational technologies (computer software, multimedia shareware, TV, World Wide Web sites, etc.) from the perspective of basic research and theory in human cognitive and social development. Provides a framework for reasoning about the most developmentally appropriate uses of technology for people at different ages.

HUDK 4080. Educational psychology (3) Professor Williams. Examines landmark issues in educational psychology, highlighting philosophical underpinnings and empirical evidence, tracing each issue from its roots to contemporary debates and evaluating current educational practice.

## HUDK 5020. Development of creativity

 (2-3)Dr. Hanson. Major theories and contemporary research in creative work, emphasizing case studies of exceptional and historically influential individuals.

HUDK 5023. Cognitive development (3)
Professor Kuhn. Theory and research on the development of cognitive processes across the lifespan.

## HUDK 5025. Spatial thinking (3)

Professor Tversky. Analyzes research on how people learn, mentally represent, mentally transform, describe, and act on the spaces they encounter. Mental models of and transformations of space underlie the way people think about abstract domains, so thought about space has implications for thought in general. Implications for education and HCI are considered.

HUDK 5030. Visual explanations (3)
Professor Tversky. Surveys production and comprehension of visualizations ranging from ancient cave paintings and petroglyphs to diagrams, charts, graphs, comics, picture books, photographs, gesture, and film to
extract and apply techniques for conveying objects, actions, forces relations, and emotions, meanings that are both inherently visible and non-visible. Implications for education, art, media, and HCI are drawn.

HUDK 5034. Cognitive research methods and applications (3)
Professor Black. Prerequisite: HUDK 4029 or equivalent. Introduction to techniques in psychological investigations of learning, language, memory and thought, psychological analysis of instruction, and other practical problems.

HUDK 5035. Psychology of media (2-3) Professor Black. Covers psychological theories and research that relate to various media and what people learn directly and indirectly from them. Fee: $\$ 50$.

## HUDK 5039. Design of intelligent learning

 environments (3)Faculty. Prerequisite: MSTU 4083 or permission of instructor. Covers ideas about representation of knowledge, models of the learner, and teaching strategies that have been developed in artificial intelligence and cognitive psychology. Students have the opportunity to design and implement intelligent computerassisted instruction materials. Special fee: $\$ 50$.

## HUDK 5090. Psychology of language

 and reading (2-3)Professor Williams. Basic theories, empirical findings, and educational applications in the psychology of language and reading: the cognitive processes involved in the perception and production of oral and written language.

HUDK 5120. Development of creativity: The case study method (3)
Dr. Hanson. HUDK 5020 recommended. Focuses on the case study method for understanding the principles and concepts underlying creative individuals and their products.

HUDK 6095. Critical review of current journals in psychology (3)
Professor Williams. Limited to candidates in psychology; others by permission. Critical review of current journals in psychology and education, analysis of articles, discussion of general trends in current theoretical and research literature, and guidance in preparing manuscripts for publication in peer-reviewed journals.

## See also:

HBSK 5096. The psychology of memory (3) Professor Peverly. See the Department of Health and Behavior Studies for course description.

MSTU 4133. Cognition and computers (3) See the Department of Mathematics, Science, and Technology for course description.

MSTU 4134. Cognition and computers
lab (1-3)
Permission required. Corequisite: MSTU 4133. See the Department of Mathematics, Science, and Technology for course description.

## Advanced and Specialized Courses

HUD 4120. Methods of empirical research (3)

Faculty. An introduction to basic concepts and issues in measurement. Descriptive statistics, scales of measurement, norms, reliability, validity. Advantages and limitations of measurement techniques are discussed and illustrated.

HUDK 5024. Language development (2-3) Professor Gordon. Survey of research and theory in the development of language, beginning with communication and the origins of language in infancy and emphasizing acquisition of the forms of language in relation to their content and use.

HUDK 5080. Experimental psychology: Schooling and reading (2-3)
Professors Black and Williams. Permission required. Open only to doctoral students in psychology. Critical evaluation of experimental investigations of cognitive processes and school-related problems.

## HUDK 5197. Psychology of training in

 e-learning and industry (3)Faculty. The design, conduct, and evaluation of training in closed systems. A critical review of available methods for task analysis, formative development, and the creation of performance aids. Special fee: $\$ 15$.

HUDK 5198. Psychology of instructional systems design (2-3)
Faculty. Enrollment limited. Systematic approaches to instructional design in schools and corporate settings. Theoretical and empirical bases. Analysis of case-based examples. Materials fee: $\$ 25$.

## HUDK 5324. Research work practicum

 (2-3)Faculty. Students learn research skills by participating actively in an ongoing faculty research project.

## HUDK 6522. Seminar in cognitive

 processes (2-3)Faculty. Permission required. Advanced discussion of topics in cognitive psychology and their implications for instruction.

## HUDK 6523. Seminar in cognitive

 development (3)Professor Kuhn. Permission required. Advanced topics in research and theory in cognitive development.

HUDK 6530. Seminar in theoretical issues in cognitive and educational psychology (1-3)
Faculty. Permission required. Limited to doctoral candidates in psychology.

HUDK 6539. Research practicum in educational psychology, cognition, and learning (1-3)
Faculty. Permission required. Limited to doctoral candidates in psychology.

HUDK 6592. Advanced research seminar: Learning and instruction (3)
Faculty. Permission required. Limited to doctoral candidates only. Review and discussion of advanced topics in learning, memory, and cognition and their relationship to educational issues and problems. This course may be repeated.

HUDK 6630. Special topics in cognitive or educational psychology (2-3)
Faculty. Permission required. Topics to be announced.

See also:
HBSK 4074. Development of reading comprehension strategies and study skills (2-3)
Professor Peverly. See the Department of Health and Behavior Studies for course description.

HBSK 4077. Adult basic literacy (2-3) Faculty. See the Department of Health and Behavior Studies for course description.

## Independent Study and Research

 Students may register for intensive individual study of a topic of special interest. Registration in independent study is by permission of the instructor under whose guidance the work will be undertaken. Credit may range from 1 to 3 points each term except for HUDK 8901 (Dissertation advisement); registration is not limited to one term. Hours for individual conferences are to be arranged.HUDK 4902. Research and independent study (1-3)
Faculty. Permission required.
HUDK 6902. Advanced research
and independent study (1-3)
Faculty. Permission required.
HUDK 7502. Dissertation seminar (1-3) Faculty. Permission required. Development of doctoral dissertation and presentation of plans for approval. Registration limited to two terms.

HUDK 8901. Dissertation advisement (0) Faculty. Individual advisement on doctoral dissertation. Fee to equal 3 points at current tuition rate for each term. See catalog section on Continuous Registration for Ed.D./Ph.D. degrees.

See also selected courses and their descriptions in the following programs:

## Program in Measurement, Evaluation and Statistics

- HUDM 5058. Choice and decision making (3)


## Program in Applied Linguistics

- A\&HL 4000. Introduction to linguistics (2-3)

Program in School Psychology

- HBSK 4074. Reading comprehension strategies and study skills (2-3)
- HBSK 4077. Adult basic literacy (2-3)
- HBSK 5096. The psychology of memory (3)


## Program in Instructional Technology and Media

- MSTU 4008. Information technology and education (3)
- MSTU 4080. Television and video applications in education (3)
- MSTU 4083. Instructional design of educational technology (3)
- MSTU 4085. New technologies for learning (2-3)
- MSTU 5030. Intelligent computerassisted instruction (3)
- MSTU 5191-5192. Educational video production I and II (3-4)
- MSTU 5194. Models of human-computer interaction (3-4)


## DEVELOPMENTAL Psychology Programs

The Developmental Psychology Programs area of study offers a master's degree (M.A.) in Psychology-Developmental and a doctoral degree (Ph.D.) in Developmental Psychology.

## PSYCHOLOGYDEVELOPMENTAL

Program Coordinator:
Professor Jeanne Brooks-Gunn
Program Office: (212) 678-4190
Email: brooks-gunn@columbia.edu
Website: www.tc.edu/hud/DevPsych

## Degree Offered:

PSYCHOLOGY-DEVELOPMENTAL (DEVM)
Master of Arts (M.A.)

## Program Description:

The Master of Arts in developmental psychology typically requires completion of 32 points.

In accordance with individual interests and objectives, students acquire familiarity with basic theoretical and research orientations as well as exposure to substantive knowledge in the areas of cognitive, language, personality, and social functioning and development. Opportunity exists for the study of deviant as well as normal psychological functioning within a developmental framework.

Students may register for independent study in order to undertake theoretical or empirical research projects or fieldwork. Students whose goal is to acquire professional skills in clinical or counseling psychology may enroll in introductory course offerings, which in many cases can be applicable if the student is later admitted to one of the more advanced master's or doctoral programs in these areas.

In order to accommodate the diverse aims of individual students, a considerable degree of flexibility has been built into the course of study leading to the M.A. degree. An attempt has been made to minimize specific course requirements, and the student will find that there is a good deal of freedom to choose from among the many offerings provided by Teachers College and the Columbia University Graduate Faculties. In consultation with an advisor, students may create an individually tailored program of study, or may enter a concentration in Risk, Resilience, and Prevention; Developmental Psychology for Educators; or Creativity and Cognition.

The course of study has these main components:

- A basic course in methods of research.
- Required courses in cognitive development, personality development in atypical populations, and social and personality development.
- A basic course in statistics.
- Research practicum.
- Electives in developmental psychology plus relevant electives offered by other Teachers College and Columbia University programs.
- A special project.

Students completing the M.A. degree accept positions in research laboratories or field settings, biomedical institutions, educational and child care agencies, foundations, public policy settings, state and local governments, community programs, and as instructors in community colleges, or they go on to pursue more advanced degrees in particular areas of specialization.

Students may elect, but are not required, to concentrate study in one of the following areas:

- Risk, Resilience, and Prevention: This concentration brings knowledge of developmental psychology to future work relating to competence and maladjustment among atrisk children and families. Diverse areas are considered, ranging from intellectual giftedness/mental retardation and academic achievement to child poverty, cross-cultural differences, resilience, and different domains of psychopathology.
- Developmental Psychology for Educators: This concentration helps to promote an understanding of development in varying social contexts and cultures, ethnic and racial groups, and social classes. It focuses on how knowledge about development, thinking, and learning can be applied to educational practice and to educational policy.
- Creativity and Cognition: Focusing on the importance, development, and influence of creativity, this concentration is designed for those interested in creative problem-solving and multi-modal thinking as it affects the classroom, curriculum development, community organizations, therapeutic settings, and business.


## Special Application <br> Requirements/Information:

Applicants who have undergraduate degrees in fields other than psychology will be considered for admission to the M.A. program, as well as those whose previous training is in psychology.

## Degree Requirements:

## Master of Arts- 32 points

Core Courses (five courses, 15 points):
M.A. students take five core courses.

- HUD 4120 Methods of empirical research (must be with Developmental Psychology Faculty) (3)
- HUDK 5023 Cognitive development (3)
- HUDK 5040 Development and psychopathology: Atypical contexts and populations (2-3)

Either one of the following two courses:

- HUDK 5121 Personality development and socialization in childhood (2-3)
or
- HUDK 5029 Personality development and socialization across the lifespan (2-3)

For the fifth course, there are several options:

- HUDK 4027 Development of mathe-
- HUDK 4029 matical thinking (3)
-HUDK 4029 Human cognition and
- HUDK 4080 Educational psychology (3)
- HUDK 5024 Language development (2-3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 6620 Special topics in developmental psychology (3)
- BBS 5068-5069 Brain and behavior I and II (1-2 each)

Specialized Courses (two courses, 6 points):
Two courses in developmental psychology taken for
3 points each:

- HUDK 5324 Research work practicum (2-3)
- HUDK 6539 Research practicum in educational psychology, cognition, and learning (1-3)
Plus one additional course in developmental psychology


## Breadth Courses (two courses, 4-6 points):

Three Teachers College courses outside of developmental psychology taken for 2-3 points each.

Statistics Course (one course, 3 points):

- HUDM 4120 Basic concepts in statistics (if no undergraduate statistics) (3) or
- HUDM 4122 Probability and statistical inference (3)
or
- HUDM 5122 Applied regression analysis (3)


## Elective Course:

One course selected in consultation with an advisor.

Note: In consultation with an advisor and with permission of the supervising faculty member, a relevant independent study may be taken.

Special Research Project: The special research project is a research paper written under the supervision of a faculty advisor. The project can be an empirical research study, an evaluation of an educational program, or a research review article.

## DEVELOPMENTAL PSYCHOLOGY

## Program Coordinator:

Professor Jeanne Brooks-Gunn

| Program Office: $\quad$ (212) 678-4190 |  |
| :--- | :---: |
| Email: | brooks-gunn@columbia.edu |
| Website: www.tc.edu/hud/DevPsych |  |

Website: www.tc.edu/hud/DevPsych

## Degree Offered:

DEVELOPMENTAL PSYCHOLOGY (DEVD)
Doctor of Philosophy (Ph.D.)

## Program Description:

The 75 -point doctoral degree prepares students for faculty positions in colleges, graduate schools of education, and universities, and for positions as research associates in research laboratories, biomedical schools, foundations, public policy, and arts and sciences, as well as policy research firms, governmental agencies, and NPOs. Throughout their program, doctoral candidates work in a close apprentice relationship with a faculty advisor of their choice. The Ph.D. degree requires completion of 75 points with an empirical research dissertation.

The aim of instruction at the doctoral level is to produce a psychologist who can make a sound and innovative research contribution to the study of human development, who is concerned with the relationship between development and education, and who is equipped to teach about such matters. Students acquire the conceptual background and methodological skills necessary for faculty positions in colleges and universities or for positions as associates and consultants in research laboratories, biomedical schools, and other applied settings.

While consultation between student and faculty advisor is considered to be the best way to decide which steps should be taken towards these goals, there are specific requirements for all students in Developmental Psychology that serve to define the character of the program and to ensure that all students have a common experience and acquire a common level of expertise in dealing with the core issues in the field.

The courses offered through the program provide content in the research and theoretical literature relating to all phases of the psychology of human development. All age groups are covered, from infancy through childhood, adolescence to adult-
hood, and later life. Coursework in developmental psychology can be supplemented by courses in the other psychology programs at Teachers College as well as by courses in the social sciences, linguistics, and other fields offered at Teachers College and the graduate faculty of Columbia University (including the Columbia University College of Physicians and Surgeons). The doctoral program is focused primarily on training in the conduct of empirical (e.g., experimental, observational, and interview) research. Other types of research (theoretical, descriptive, and historical) may be undertaken in special circumstances of student and advisor competence.

## Special Application

## Requirements/Information:

This program accepts applications for fall semester only. GRE is required; Subject Test in Psychology is optional. Admission to the program is highly competitive. Primary emphasis in evaluating applicants is given to prior achievements and recommendations, particularly as evidence of a self-motivated research involvement.

Previous work in psychology is highly desirable but there are no fixed course requirements. Expertise in a related field, such as linguistics, philosophy, anthropology, or biology, may qualify a student as well. At least one year of fulltime study in residence, i.e., two semesters of 12 or more points per semester, is required.

## Degree Requirements:

The 75 -point course of study has four components:

- Breadth Requirement. Students choose four courses, with at least one chosen from each of the following areas: Biological Basis of Behavior, Cognitive Basis of Behavior, Social/ Cultural Factors and Individual Differences, and Measurement.
- Doctoral Requirements. Students are required to take advanced courses in Developmental Psychology as well as proseminar (HUDK 6620, Special topics in developmental psychology).
- Methodology. All students are required to take the four-course statistics sequence. Students are required to take a special certification examination in research methodology. Students, in consultation with their advisor, should also enroll in the necessary advanced coursework to prepare for both the certification examination and their own research work.
- Qualifying Paper. Students are required to write both a theoretical and an empirical paper to qualify for dissertation status.

Core Courses (12 points): Usually taken during the first year of study:

- HUDK 6010 Developmental research methods (3)
- HUDK 6520 Seminar in social and emotional development through childhood and adolescence (3)
- HUDK 6523 Seminar in cognitive development (3)
- HUDK 6529 Seminar in risk, resilience, and developmental psychology (3)


## Specialized Courses (Approximately 21 points):

Selected in consultation with an advisor.
Methodology Courses (12 points):
Beginning in first year of study:

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6122 Multivariate analysis I (3)

Breadth Courses: (One course in each area for a minimum of 2 points each; total of 11-12 points):

1. Biological Basis of Behavior

- BBS 5068 Brain and behavior I (1-2)
- BBS $5069 \quad$ Brain and behavior II (1-2)
- MSTC 5000 Neurocognitive models of information processing (1-3)

2. Cognitive Basis of Behavior

- HUDK 4015 Psychology of thinking (2-3)
- HUDK 4029 Human cognition and learning (3)
- HUDK 5023 Cognitive development (3)
- HUDK 5024 Language development (2-3)
- HUDK 5025 Spatial thinking (3)
- HUDK 5030 Visual explanations (3)
- HUDK 5090 Psychology of language and reading (2-3)
- CCPX 5020 Emotion, culture, and health (3)
- HBSK 5096 The psychology of memory (3)

3. Social Cultural Factors and Individual Differences

- HUDK 5029 Personality development and socialization across the lifespan (2-3)
- HUDK 5040 Development and psychopathology: Atypical contexts and populations (2-3)
- HUDK 5121
- HUDK 5125
- HUDK 6036
- HBSK 5031
- ORLJ 5017
- ORLJ 5106
- ORLJ 5540

Personality development and socialization in childhood (2-3)
Cross-cultural developmental psychology (2-3) Child and family policy I (3) Family as a context for child development (3) Small group intervention: Theory and method (2-3) Psychological aspects of organizations (2-3) Proseminar in social and organizational psychology (3)
4. Measurement

- HUDM 5059 Psychological measurement (3)
- HUDM 6051 Psychometric theory I (3)
- HUDM 6055 Latent structure analysis (3)

Proseminar Requirement (6 points):
Taken over four semesters:

- HUDK 6620 Special topics in developmental psychology (1-3)


## Non-departmental Courses (Minimum of 8 points):

At least three courses outside the department selected in consultation with an advisor.

## Other Requirements:

- HUDK 6901 Advanced research and independent study (1-3 points)
- HUDK 7501 Dissertation seminar (1-3 points)
- Service as a teaching assistant for two Master's-level Developmental Psychology courses
- Supervision of Master's student's special projects
- Enrollment in research practica
- Successful completion of certification examination
- Approved theoretical paper (concomitant with enrollment in HUDK 6901)
- Approved empirical paper
- Approved doctoral dissertation


## COURSES:

HUD 4120. Methods of empirical research (2-3)
Faculty. An introduction to basic concepts and issues in measurement. Descriptive statistics, scales of measurement, norms, reliability, validity. Advantages and limitations of measurement techniques are discussed and illustrated.

## HUDK 4021. Developmental psychology:

 Infancy (2-3)Dr. Lao. Review of research and theory in early perceptual, cognitive, and social/emotional development, with particular attention to the
interaction of biological and environmental factors in early life.

HUDK 4022. Developmental psychology: Childhood (2-3)
Faculty. Children's cognition, perception, representation, language, affect, personality, and sexuality. Family structure and school as they influence these aspects of childhood.

HUDK 4023. Developmental psychology: Adolescence (2-3)
Dr. Locker. Theoretical and empirical studies of personality and social development processes in adolescence. An ecological systems approach is emphasized.

HUDK 4024. Developmental psychology: Adulthood and the lifespan (2-3) Dr. Miller. Theories of adult development, with an emphasis on the historical transformation of adult roles, and the significance of marriage, family, child rearing, work, and social class in adulthood socialization.

HUDK 4027. Development of mathematical thinking (3)
Professor Ginsburg. The development of informal and formal mathematical thinking from infancy through childhood with implications for education.

HUDK 4030. Cognitive clinical interview (3) Professor Ginsburg. Introduction to the cognitive clinical interview and exploration of how it has and can be used in psychological and educational research and assessment.

## HUDK 4820. Education for thinking:

 Goals and methods for the middle school (1) Professor Kuhn. Identifies and examines skills of argument, analysis, and inference that are central to critical thinking, reviews research on how they develop with practice during late childhood and early adolescent years, and illustrates methods that support their development, suitable for use in classrooms from middle elementary through junior high school years.HUDK 5020. The development of creativity (2-3)
Dr. Hanson. Major theories and contemporary research in creative work, emphasizing case studies of exceptional and historically influential individuals.

HUDK 5022. Emotional development (2-3) Faculty. Theory and research in the development of emotional experience and expression.

HUDK 5023. Cognitive development (3) Professor Kuhn. Theory and research on the development of cognitive processes across the lifespan.

HUDK 5024. Language development (2-3) Professor Gordon. Survey of research and theory in the development of language, beginning with communication and the origins of lan-
guage in infancy and emphasizing acquisition of the forms of language in relation to their content and use.

HUDK 5027. Moral development (2-3) Dr. Lao. Prerequisite: HUDK 4020, HUDK 4023, HUDK 4024, or equivalent. Investigation of the major theoretical and empirical approaches to the study of how morality develops with particular emphasis on the behaviorist, cognitive, psychoanalytic, and sociopolitical approaches.

## HUDK 5028. Spiritual development across

 the lifespan (3)Dr. Miller. This course concentrates on the role of spirituality on human development using a multidisciplinary focus. Spiritual traditions are examined using stage theory and parallel theories from other fields.

HUDK 5029. Personality development and socialization across the lifespan (2-3) Dr. Miller. Theory and research regarding the interaction between naturally developing personality structures and socialization processes throughout life.

HUDK 5040. Development and psychopathology: Atypical contexts and populations (2-3)
Professor Luthar. Using contemporary research as the basis, the focus is on the interface between classical developmental psychology theories and patterns of development identified in atypical contexts (e.g., poverty) and among atypical populations (e.g., resilient youth). Implications for interventions and policy are also discussed.

HUDK 5120. Development of creativity: The case study method (3)
Dr. Hanson. HUDK 5020 recommended. Focuses on the case study method for understanding the principles and concepts underlying creative individuals and their products.

HUDK 5121. Personality development and socialization in childhood (2-3) Professor Brooks-Gunn. Prerequisite: HUDK 4022 or equivalent. Contemporary theory and research on children's adaptation to developmental tasks of childhood. Comparison of typical and atypical pathways in social-personality development. Analysis of the logic and method of empirical studies of development.

## HUDK 5123. Psychological development

 of women (3)Faculty. Theoretical and empirical issues concerning women's psychosocial development, viewed in the context of modern feminist thought.

HUDK 5125. Cross-cultural developmental psychology (2-3)
Faculty. Survey of psychological studies of development in different cultures, with emphasis on perceptual and cognitive issues
and methodological problems specific to cross-cultural research.

## HUDK 5324. Research work practicum

 (2-3)Faculty. Students learn research skills by participating actively in an ongoing faculty research project.

## HUDK 6010. Developmental research

 methods (3)Faculty. Advanced survey of both new and classical methods for conducting research designed to answer developmental questions.

HUDK 6013. Early childhood development and education: Integrating research and policy perspectives (3)
Professor Brooks-Gunn. Two-semester course taught by Human Development and Educational Policy and Social Analysis faculty. Links research and policy perspectives on early childhood, with a focus on contemporary challenges in the field.

HUDK 6036-HUDK 6037. Child and family policy I and II (3)
Professor Brooks-Gunn. Prerequisites: Any two of the following: HUDF 4000; HUDF 4024; HUDK 4021; HUDK 4022; C\&T 4113; C\&T 5113. Provides a multi-disciplinary perspective on child and family policy. Also provides a foundation of knowledge concerning the role of child and family perspectives in informing policy.

HUDK 6520. Seminar in social and emotional development through childhood and adolescence (2-3)
Professor Brooks-Gunn. Permission required. How people become socialized and how psychology deals with the process in terms of developmental concepts.

HUDK 6523. Seminar in cognitive development (2-3)
Professor Kuhn. Permission required. Advanced topics in research and theory in cognitive development.

HUDK 6524. Seminar in cross-cultural developmental psychology (2-3)
Faculty. Permission required. Students participate in ongoing research.

HUDK 6529. Seminar in risk, resilience, and developmental psychology (2-3) Professor Luthar. Permission required. Students participate in ongoing research.

HUDK 6620. Special topics in developmental psychology (1-3)
Faculty. Permission required. Topics to be announced.

## Independent Study and Research

Students may register for intensive individual study of a topic of special interest. Registration in independent study is by permission of the instructor under whose guidance the work will be undertaken. Credit may range from 1 to 3 points each term except for HUDK 8900.
(Dissertation hours for individual consultation are to be arranged.)

HUDK 4901. Research and independent study (1-3)
Faculty. Permission required.
HUDK 6901. Advanced research and independent study (1-3)
Faculty. Permission required.
HUDK 7501. Dissertation seminar (1-3)
Faculty. Permission required. Development of doctoral dissertations and presentation of plans for approval. Registration limited to two terms.

HUDK 8900. Dissertation advisement (0) Faculty. Individual advisement on doctoral dissertation. Fee to equal 3 points at current tuition rate for each term. See the section on Continuous Registration for Ed.D./Ph.D. degrees for details.

## Measurement, Evaluation, AND Statistics

The Measurement, Evaluation, and Statistics area of study includes the following programs: Applied Statistics; Measurement and Evaluation.

Program Coordinators:
Matthew S. Johnson
(Applied Statistics)
Program Office: (212) 678-4150
Email: johnson@tc.edu
Website: www.tc.edu/hud/Measurement
Lawrence T. DeCarlo
(Measurement and Evaluation)
Program Office: (212) 678-4150
Email: decarlo@tc.edu
Website: www.tc.edu/hud/Measurement

## APPLIED STATISTICS

## Degree Offered:

APPLIED STATISTICS (STAT)
Master of Science (M.S.)

## Program Description:

The M.S. in Applied Statistics requires at least one year of study. This master's degree provides
training for a number of positions in applied research settings, testing organizations, and business organizations. In addition to the satisfactory completion of coursework, an integrative project is required.

## Special Application

## Requirements/Information:

GRE General Test is required for the M.S. in Applied Statistics. Background in calculus is also required.

## Degree Requirements:

Master of Science-32 points
Applied Statistics ( 27 points):

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6030 Multilevel and longitudinal data analysis (3)
- HUDM 6055 Latent structure analysis (3)
- HUDM 6122 Multivariate analysis I (3)
- HUDM 6123 Multivariate analysis II (3)
- W 4105
- W 4107

Statistical inference (3)*

* These courses are taken at the Graduate School of Arts and Sciences at Columbia University.


## Electives (5 points):

Selected in consultation with an advisor and within the areas of management science, economics, public health, computer science, psychology, sociology, or research methods in any general area.

## Breadth Requirement (4-6 points):

At least two courses (for a minimum of 2 points each) must be taken at Teachers College from outside the department.

Culminating Experience: Special project.

## MEASUREMENT AND EVALUATION

## Degrees Offered:

MEASUREMENT AND EVALUATION (MEAS)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## Program Descriptions:

The Ed.D. and Ph.D. programs in Measurement and Evaluation are designed to prepare graduates for careers in a wide range of educational settings. Graduates acquire specialized knowledge and skills in test theory, test and instrument development and validation, pro-
gram evaluation, and quantitative analysis of educational and psychological data. Some graduates pursue careers as college professors teaching measurement, evaluation, and statistics. Some are employed in city or state departments of education in the planning and supervision of testing programs and research and evaluation projects. Others work for test publishers, licensure and certification boards, and government agencies in the construction of tests or in the management of large-scale testing programs. Still others work in applied measurement, evaluation, research design, and statistics in a variety of social science, health care, business, and industrial settings.

The Ed.M. in Measurement and Evaluation is a two-year master's degree. It provides training for a number of positions in educational research bureaus and testing organizations.

In addition to the satisfactory completion of coursework, an integrative project is required for the master's degree.

A doctorate is required for most college teaching positions and for positions of professional responsibility in testing organizations, departments of education, and licensure and certification boards. The Ph.D. is appropriate for individuals with strong quantitative and technical skills who wish to focus on theoretical

issues in measurement and evaluation or who have a strong background in a substantive area of psychology in which they wish to further the development and application of measurement techniques.

The Ed.D. is appropriate for individuals who wish to focus on the application of measurement and evaluation techniques in education, psychology, and business and industry. Both doctoral degrees are accepted as qualification for faculty positions in schools of education in the United States.

## Special Application <br> Requirements/Information:

GRE General Test is required for all programs in Measurement and Evaluation. Some preparation in college-level mathematics or statistics coursework is required for doctoral study.

## Degree Requirements:

## Master of Education-60 points <br> Measurement and Evaluation <br> Core Courses ( 12 points): <br> - HUDM 5059 Psychological measurement (3)

- HUDM 6051-6052 Psychometric theory I and II (3 each)
- HUDM 6055 Latent structure analysis (3)

And at least 6 points selected from the following or other courses selected in consultation with an advisor:

- P8582 Program evaluation design for health policy and management (3) at Mailman School of Public Health
- P8640 Methods in program evaluation (3) at Mailman School of Public Health
- P8705 Evaluation of health programs (3) at Mailman School of Public Health
- T6416 Program evaluation in social services (3) at School of Social Work
- ORLH 5533

Advanced professional seminar: Faculty evaluation and development programming (2-3)

Quantitative Methods (15 points):

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6030
- HUDM 6122 Multivariate analysis I (3)


## Psychology (12 points):

Taken in one or more of the following areas: Developmental psychology, cognitive studies, counseling psychology, organizational psychology, or social psychology.

## Research Methods (6 points):

- HUD 4120 Methods of empirical research (3)
- HUDM 5250 Research practicum in measurement and evaluation (0-4)


## Other Aspects in Education

 (6-9 points):To satisfy college requirements, all students must complete a minimum of three Teachers College courses (a course for this purpose is one in which at least 2 points are earned) outside of HUDM: One course in foundations of education and two courses in curriculum and teaching and/or educational leadership.

## Electives:

Chosen in consultation with an advisor and designed to strengthen and broaden the student's professional preparation.

Culminating Experience: A supervised project.
Doctor of Philosophy- 75 points Measurement and Evaluation Core Courses ( 21 points):

- HUDM 5059 Psychological measurement (3)
- HUDM 5124 Multidimensional scaling and clustering (3)
- HUDM 5250 Research practicum in measurement and evaluation (0-4)
- HUDM 6030 Multilevel and longitudinal data analysis (3)
- HUDM 6051-6052 Psychometric theory I and II (3 each)
- HUDM 6055 Latent structure analysis (3)

And at least 3 points selected from the following or other courses selected in consultation with an advisor:

- HUDM 5058 Choice and decision making (3)
- HUDM 6552 Seminar: Selected topics in measurement theory (3)

Quantitative Methods and Research Design (29 points):

- HUD 4120 Methods of empirical research (3)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6026 Statistical treatment of mass data (3)
- HUDM 6122-6123 Multivariate analysis I and II (3 each)
- HUDM 7500 Dissertation seminar (1-3 each for two semesters)
- HUDM 8900 Dissertation advisement (0)
- W4105 Probability (3)*
- W4107 Statistical inference (3)*
*These courses are taken at the Graduate School of Arts and Sciences at Columbia University.

Psychology (minimum of 15 points):
In consultation with an advisor, a group of courses aimed at substantive preparation in the field of psychology.

## Non-department Requirement (7 points):

Courses in the social sciences, curriculum and teaching, and educational leadership selected in consultation with an advisor from offerings at Teachers College and other branches of Columbia University.

Special Requirements: The first two years require full-time study. An empirical paper and a research paper, certification examination, and completion of an approved doctoral dissertation, are also required.

## Doctor of Education-90 points Measurement and Evaluation

 Core Courses (18 points):- HUDM 5059 Psychological measurement (3)
- HUDM 5250 Research practicum in measurement and evaluation (0-4)
- HUDM 6030 Multilevel and longitudinal analysis (3)
- HUDM 6051-6052 Psychometric theory I and II (3 each)
- HUDM 6055 Latent structure analysis (3)

And at least 9 points selected from the following or other courses selected in consultation with an advisor:

- HUDM 5058 Choice and decision making (3)
- HUDM 6552 Seminar: Selected topics in measurement theory (3)

And at least one evaluation course selected from the following:

- P8582 Program evaluation design for health policy and management (3) at Mailman School of Public Health
- P8640 Methods in program evaluation (3) at Mailman School of Public Health
- P8705 Evaluation of health programs (3) at Mailman School of Public Health
-T6414 Program evaluation in social services (3) at School of Social Work

Quantitative Methods and Research Design (27 points):

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and
experimental design (3)
- HUDM 5124 Multidimensional scaling and clustering (3)
- HUDM 6026 Statistical treatment of mass data (3)
- HUDM 6122 Multivariate analysis I (3)
- P8120
- HUDM 7500 Dissertation seminar (1-3 each for two semesters)
- HUDM 8900 Dissertation advisement (0)

Psychology (minimum of 18 points): In consultation with an advisor, a group of courses aimed at substantive preparation in the field of psychology.

Related Courses (minimum of 6 points): Selected in consultation with an advisor from the areas of curriculum development, guidance, applied human development, supervision, and administration.

Electives (maximum of 10 points):
Selected to meet special interests and needs.
Special Requirements: The first two years require full-time study. An empirical paper and a research paper, certification examination, and completion of an approved doctoral dissertation, are also required.

## COURSES:

Courses at the 4000 level usually do not require permission of the instructor and are
open to nonmajors as well as majors. Many 5000 -level offerings are also open to nonmajors with appropriate backgrounds; 6000level courses are usually limited to majors with advanced standing in the program. See listings below for prerequisites and limitations on enrollment. In addition to the courses listed below, students should consult the offerings of other programs in psychology, many of which are required or recommended in the program guides obtainable from the department office.

## Measurement and Evaluation

HUD 4120. Methods of empirical research (3) Faculty. An introduction to the methods of scientific inquiry, research planning, and techniques of making observations and analyzing and presenting data.

HUDM 4050. Introduction to measurement (2-3)
Professor DeCarlo. An introduction to basic concepts and issues in measurement. Descriptive statistics, scales of measurement, norms, reliability, validity. Advantages and limitations of measurement techniques are discussed and illustrated.


HUDM 5058. Choice and decision making (3) Professor Corter. Prerequisite: HUDM 4122 or equivalent. Surveys quantitative models of individual decision making, from the introduction of the notion of "utility" by Daniel Bernoulli through current models such as Tversky and Kahneman's "Prospect Theory." The focus is on psychological or descriptive models of how people make decisions, although methods of rational decision analysis are briefly discussed.

HUDM 5059. Psychological measurement (3) Professor DeCarlo. Open to doctoral and Ed.M. students in psychology; others only by permission. A previous course in statistics or measurement is recommended. An in-depth examination of measurement and associated techniques, norms, classical test theory, reliability, validity, item response theory, issues, and applications.

HUDM 5250. Research practicum in measurement and evaluation (0-4) Faculty. Permission required. Students enrolled are expected to spend a semester involved in a research project, either assisting a faculty member or in an applied setting. A formal report will be submitted.

HUDM 6030. Multilevel and longitudinal data analysis (3)
Professor DeCarlo. Prerequisite: HUDM 5122.
Multilevel models include a broad range of models called by various names, such as random effects models, multi-level models, and growth curve models. This course introduces the background and computer skills needed to understand and utilize these models.

HUDM 6051-HUDM 6052. Psychometric theory I and II (3 each)
Professor Lee. Permission required. Prerequisites: HUDM 5059, HUDM 5122, or equivalents. Psychometric theory underlying test construction; classical test theory, item response theory, and applications.

HUDM 6055. Latent structure analysis (3) Professor DeCarlo. Permission required. Prerequisite: HUDM 5122. Recommended: HUDM 6122. Study of latent structure analysis, including measurement models for latent traits and latent classes, path analysis, factor analysis, structural equations, and categorical data analysis.

HUDM 6552. Seminar: Selected topics in measurement theory (3)
Faculty. Prerequisites: HUDM 6051 and HUDM 6122. One or more topics of current interest examined in depth.

## Statistics

HUDM 4120. Basic concepts in statistics (3) Faculty. Descriptive statistics including organizing, summarizing, reporting, and interpreting data. Understanding relationships expressed by
cross-tabulation, breakdown, and scatterdiagrams. Designed as a one-semester introduction to statistical methods. Will include reading journal articles.

HUDM 4122. Probability and statistical inference (3)
Faculty. Prerequisite: HUDM 4120 or undergraduate statistics course. Elementary probability theory; random variables and probability distributions; sampling distributions; estimation theory and hypothesis testing using binomial, normal, T, chi square, and $F$ distributions.

HUDM 5122. Applied regression analysis (3) Faculty. Prerequisite: HUDM 4122 or permission of instructor. Least squares estimation theory. Traditional simple and multiple regression models and polynomial regression models, with grouping variables including one-way ANOVA, two-way ANOVA, and analysis of covariance. Lab devoted to applications of SPSS regression program. Lab fee: $\$ 50$.

HUDM 5123. Linear models and experimental design (3)
Faculty. Prerequisite: HUDM 5122. Analysis of variance models including within subject designs, mixed models, blocking, Latin Square, path analysis, and models with categorical dependent variables. Lab devoted to computer applications. Lab fee: $\$ 50$.

## HUDM 5124. Multidimensional scaling

 and clustering (3)Professor Corter. Permission required. Prerequisites: HUDM 4122 and HUDM 5122 or equivalent. Methods of analyzing proximity data (similarities, correlations, etc.), including multidimensional scaling, which represents similarities among items by plotting the items into a geometric space, and cluster analysis for grouping items.

HUDM 6026. Statistical treatment of mass data (3)
Professor Johnson. Prerequisite: HUDM 5123 or equivalent. Examines problems involved in preparing and analyzing large data sets. Includes a survey of data manipulation and statistical tools in SAS (Statistical Analysis System). Optional topics: introduction to numerical methods and survey of "data mining" tools.

HUDM 6122. Multivariate analysis I (3) Professor Johnson. Permission required. Prerequisite: HUDM 5122 or equivalent; HUDM 5123 is recommended. An introduction to multivariate statistical analysis, including matrix algebra, general linear hypothesis and application, profile analysis, principal components analysis, discriminant analysis, and classification methods.

HUDM 6123. Multivariate analysis II (3) Faculty. Permission required. Prerequisite: HUDM 6122. A continuation of multivariate
statistical analysis, including canonical analysis, MANOVA, factor analysis, and categorical data analysis.

## Independent Study and Research

Students may register for intensive individual study of a topic of special interest. Registration in independent study is by permission of the instructor under whose guidance the work will be undertaken. Credit may range from 1 to 3 points each term except for HUDM 8900 (Dissertation Advisement), and registration is not limited to one term. Hours for individual conferences are to be arranged.

HUDM 4901. Research and independent study: Measurement and evaluation (1-3) Faculty. Permission required.

HUDM 4902. Research and independent study: Applied statistics (1-3) Faculty. Permission required.

HUDM 6900. Advanced research and independent study (1-3) Faculty. Permission required.

HUDM 7500. Dissertation seminar (1-3) Faculty. Permission required. Development of doctoral dissertations and presentation of plans for approval. Registration limited to two terms.

HUDM 8900. Dissertation advisement (0) Faculty. Individual advisement on doctoral dissertation. Fee to equal 3 points at current tuition rate for each term. See section in catalog on Continuous Registration for Ed.D./ Ph.D. degrees.

# International and Transcultural Studies 

CHAIR: Professor George C. Bond LOCATION: 375B Grace Dodge Hall TELEPHONE NUMBER: (212) 678-3947 FAX: (212) 678-8237<br>EMAIL: gcb1@columbia.edu<br>WEBSITE: www.tc.edu/ITS

## PROGRAMS:

ANTHROPOLOGY<br>160<br>Anthropology and Education<br>Applied Anthropology<br>INTERNATIONAL AND COMPARATIVE<br>EDUCATION PROGRAMS 163<br>Comparative and<br>International Education<br>International Educational<br>Development



## DEPARTMENTAL MISSION:

## The Department of International and Transcultural Studies

In recognition of the interconnectedness of all human beings around the globe, Teachers College has a longstanding commitment to the international arena.

New technologies have led to a rapidly increasing flow of people, information, goods, and services within and across national boundaries. As these boundaries become more permeable, modern societies are characterized by greater diversification of people and resources. Such diversification introduces complex forces that can be best understood as transcultural. As individual and institutional identities increasingly reflect diverse cultural traditions and values, a major challenge to education is to promote new ways of understanding and negotiating these identities.

The United States is a powerful example of an international and transcultural society, and the metropolitan area in which Teachers College is located is a particularly vivid expression of such a society. New York City and the United States are, in many ways, harbingers of what the 21st century will bring to cities and countries around the world.

International and transcultural forces will be increasingly present in all societies, and these forces will be crucial in understanding education in every domain of human experience-family, community, school, the workplace. Such education will take place not only in schools, colleges, and universities, but in all societal institutions-families; churches, synagogues, mosques, and temples; libraries, museums, and parks; mass media such as newspapers, magazines, radio, television, and computer networks; and the various kinds of workplaces that are emerging in our technological era.

Our department prepares professionals to provide leadership in the educative configurations emerging in the new century. To do so, we offer a range of disciplinary and professional programs and concentrations with distinct emphases within the collective mission. The programs in Anthropology and Comparative and International Education emphasize research on the social, cultural, economic, and political aspects of global processes. The program in International Educational Development prepares professionals across the whole range of educational practice to gain a global perspective.

Students work with faculty within the department on a variety of topics including AIDS education, civic education, drugs and society, and language and literacy. Students can concentrate within the department in such areas as African education, family and community education, international humanitarian issues, international educational policy studies, language, literacy, technology, and peace education. We work with other departments at the College to provide our students additional concentrations in such areas as adult education, conflict resolution, curriculum and teaching, educational leadership, health education, and policy studies. In addition, we cooperate with the School of International and Public Affairs at Columbia University to develop regional areas of expertise (e.g., Latin American Studies, African Studies, Eastern European Studies, Middle East Studies, Russian Studies, East Asian Studies, South Asian Studies). Students in Comparative and International Education who select academic disciplines other than anthropology (e.g., economics, sociology, political science, history, or philosophy) also work closely with faculty outside the department. Degrees are offered by programs only, not in concentrations.

## FACULTY:

## PROFESSORS:

George C. Bond
(Anthropology and Education
and Applied Anthropology)
Lambros Comitas
(Anthropology and Education
and Applied Anthropology)
Charles C. Harrington
(Anthropology and Education
and Applied Anthropology)
Jo Anne Kleifgen
(Comparative and International
Education; International
Educational Development)
Hope Jensen Leichter
(Comparative and International Education; International Educational Development) Gita Steiner-Khamsi
(Comparative and International Education; International Educational Development) Mun C. Tsang
(Economics and Education, EPSA; Comparative and International Education; International Educational Development) Hervé Varenne
(Anthropology and Education
and Applied Anthropology)

## ASSOCIATE PROFESSORS:

Lesley Bartlett
(Comparative and International Education; International Educational Development) Regina Cortina
(Comparative and International Education; International Educational Development)

## ASSISTANT PROFESSORS:

Adrianna Abdenur
(Comparative and International Education; International Educational Development) Monisha Bajaj
(Comparative and International Education; International Educational Development)

## ADJUNCT ASSISTANT PROFESSORS:

Mary Mendenhall
Moira Wilkinson
Portia Williams

## LECTURERS:

Carine Allaf
Catalina Crespo-Sancho
Kimberly Foulds

## VISITING PROFESSOR:

Mark Ginsburg
(Comparative and International Education;
International Educational Development)
POSTDOCS:
Arshad Ali
Zeena Zakharia

## INSTRUCTOR:

Andrew Shiotani
For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit us at www.tc.edu/faculty.

## Anthropology

The Anthropology area of study includes the following programs: Anthropology and Education, and Applied Anthropology.

## ANTHROPOLOGY AND EDUCATION

## Program Coordinator:

Professor Lambros Comitas

## Program Office: (212) 678-3309 <br> Email: anthropology@tc.edu

Website: www.tc.edu/its/Anthro

## Degrees Offered:

ANTHROPOLOGY AND EDUCATION (ANTH)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## APPLIED ANTHROPOLOGY

Program Coordinator:
Professor Lambros Comitas
Program Office: (212) 678-3309
Email: anthropology@tc.edu
Website: www.tc.edu/its/Anthro

## Degree Offered:

APPLIED ANTHROPOLOGY (ANTA)
Doctor of Philosophy (Ph.D.)

## Program Descriptions:

Teachers College has been a pioneer in both Anthropology and Education and Applied Anthropology. These two programs function as one entity and provide a unique research and training experience for a very select group of students. This highly personal academic environment within the larger university complex maximizes the interaction between students and faculty while offering a variety of scholarly and professional resources.

Both programs prepare students to enter current research and policy conversations about education and the application of anthropology to other fields. The programs are built on the premise that one can apply anthropology only to the extent that one has been rigorously trained in the theory and methodology of the discipline.

Theoretical emphasis is given to social and political processes, cultural theory, and psy-
chological anthropology-all from a strong cross-cultural and comparative perspective. Methodological emphasis is placed on intensive and systematic ethnography. The faculty has a distinguished record of publications and research projects, most of which has been conducted in the United States, Africa, the Caribbean, South America, and Europe.

## Anthropology and Education

The program in Anthropology and Education offers a disciplinary approach that carefully explores and contributes to the analysis and understanding of educational processes in schools and classrooms, in families, on street corners, in community centers, in churches and in all settings where education may proceed. The department houses the largest group of anthropologists of education to be found in any university in the world.

Applied Anthropology (a joint program) In 1968, Teachers College and the Graduate School of Arts and Sciences of Columbia University initiated and implemented a joint program of Applied Anthropology. This joint venture trains graduate students registered at either graduate school. By this agreement, all applied anthropological training at Columbia University is administered through Teachers College. The joint program offers a course of study and thorough training in applied anthropology that is certified by both institutions, and capitalizes on the strength of the university's faculty.

This program focuses on the complex issues involved in applying anthropological knowledge and approaches to matters of policy concern in medicine, psychiatry, psychoanalysis, economic and community development, education, businesses and corporations, institutional programs, and ecological and environmental change.

## Resources

Both the Anthropology and Education and the Applied Anthropology programs are conducted in collaboration with the Department of Anthropology at Columbia University, Graduate School of Arts and Sciences, the School of International and Public Affairs, and other professional schools and institutions of the University (School of Public Health, Lamont-Doherty Laboratory, for example).

In addition, our location in New York City allows students easy access to a myriad of prestigious academic and research institutions and provides a natural laboratory for student research on ethnicity, migration, and urban life. Students may take courses through the Inter-University Doctoral

Consortium (for participating institutions, see the Inter-University Doctoral Consortium section in this bulletin).

Most graduates find academic posts and administrative positions in colleges, universities, and professional schools. Others locate in federal and international agencies, research institutes, private foundations, medical institutions, consulting firms, and social welfare and community service organizations in the United States and abroad.

## Special Application Requirements:

Applications are reviewed for these programs on an ongoing basis. Preference in scholarship awards will be for those applicants who meet the early application deadline.

The GRE General Test is required, except of international students for whom the TOEFL is required. If the applicant will be in or near New York City, an interview with one of the program faculty is recommended.

## Degree Requirements:

## Anthropology and Education Master of Arts

The Master of Arts program in Anthropology and Education is designed for students who are planning to enter one of the doctoral programs, as well as those seeking a terminal master's degree. Administrators, counselors, evaluators, and research associates can improve their work through learning how anthropological methods are applied to educational problems, policy, and practice.

The program requires at least four courses (12 points) in anthropology offered through the Department. The program should include at least one colloquium or seminar level course; three courses ( $6-9$ points) in the fields foundational to anthropology (economics, history, linguistics, philosophy, psychology, sociology); and four other courses (11-14 points) that directly contribute to the emerging professional interest of the candidate. The M.A. program requires an integrative project in addition to the 32 -point program.

To satisfy college breadth requirements, masters students must complete three Teachers College courses (for this purpose a course is defined as one in which at least 2 points are earned) outside the major program.

## Master of Education

The Master of Education degree program is flexible, allowing students to address various professional concerns, satisfy diverse academic needs, and enhance professional skills.

Minimally, candidates for the Ed.M. degree in Anthropology and Education take 21 points in courses related to the main fields of the discipline, including at least 15 points in sociocultural anthropology. A minimum of three courses ( $6-9$ points) must be taken in fields foundational to anthropology (economics, history, linguistics, philosophy, psychology, sociology). An additional $30-33$ points must also be taken to complete the course of study. To satisfy breadth requirements, masters students must complete three Teachers College courses (for this purpose a course is defined as one in which at least 2 points are earned) outside the major program.

These courses should be chosen so as to enhance the professional preparation of the student in his or her expected field of practice. Up to 30 of the required 60 points may be transferred from previous coursework to the extent that they fulfill some of the requirements listed above. Students are also required to conduct an integrative project in addition to the 60 points of coursework.

## Doctoral Degrees

The Doctor of Education and Doctor of Philosophy degree tracks are for students who plan to engage in scholarly writing and research, applied research and evaluation, or teaching and administrative responsibilities at colleges, universities, professional schools of education and medicine, research institutes, or state, federal, and international agencies and bureaus. The following are required of students in both the Ed.D. and Ph.D. tracks:

## Certification Requirements

Certification is the means of indicating that the student is regarded as having attained the expected competencies of the program. An overall grade average of $B+$ is expected. In addition, students must complete a set of written examinations on topics relevant to Anthropology and Education and to Applied Anthropology.

## Dissertation Requirements

After passing the written certification examination, the candidate prepares a dissertation proposal to be defended in oral examination. One or two years of anthropological field research is required for the collection of original field data based on the dissertation research proposal.

## Doctor of Education

A minimum of 90 points of acceptable graduate credit is required for the Doctor of Education (Ed.D.), a minimum of 45 points must be completed through Teachers College registration. Forty-two points of major courses are required. These courses prepare students
with the requisite knowledge of epistemological , theoretical, methodological, ethnographic, and substantive areas of anthropology. They aim to develop competency in the discipline, while addressing the specific intellectual interests of the student. Fifteen points in research methods and statistical courses are also required.

An objective understanding of education and educational institutions, of persons and the learning process, and the various forms of measurement and evaluation in cognate areas prepares program graduates with the knowledge and skills necessary for researching and working in a variety of formal and non-formal educational settings through 18 points of broad and basic areas.

This leaves 15 points of electives to increase competence in comparative, regional or international studies, or to enhance technical skills used in conjunction with but outside the major course of study. At least three of these courses ( $8-9$ points) must be taken in fields foundational to anthropology (economics, history, linguistics, philosophy, psychology, sociology).

## Doctor of Philosophy

Each student develops, in collaboration with an advisor, a program of study in anthropology designed to establish a high level of competency. A minimum of 75 points of acceptable graduate credit is required for the Doctor of Philosophy (Ph.D.). Of these 75 points, a maximum of 45 points can be completed through another faculty of Columbia University, or a maximum of 30 points may be transferred in from other recognized graduate schools. A total of $40-45$ points of major courses is required, of which 40 points must be Anthropology courses.

These courses prepare students with the requisite knowledge of epistemological, theoretical, methodological, ethnographic, and substantive areas of anthropology. They aim to develop competency in the discipline, while addressing the specific intellectual interests of the student.

At least 15 points of the anthropology requirements must be taken within the TC program. A minimum of 25 points of the 40 points required in anthropology must be taken at Teachers College, or in other faculties of Columbia University. Up to 15 points in anthropology courses may be taken at other graduate institutions which are members of the Inter-University Doctoral Consortium, to satisfy major course requirements.

Within the major course requirements, 21 points in required course must be taken: the four-semester sequence of colloquia and sum-
mer field research (a minimum of 12 points); an additional theory course outside of the first semester colloquium ( 3 points); and two ethnography courses, one within and one outside of one's interest (6 points).

Fifteen points in research methods and statistical courses are also required. The remaining 15 points of electives are used to increase competence in comparative, regional, or international studies, or to enhance technical skills used in conjunction with but outside the major course of study. At least three of these courses (8-9 points) must be taken in fields foundational to anthropology (economics, history, linguistics, philosophy, psychology, sociology.) Of the 75 graduate points required for the degree, a minimum of 45 must be taken for an evaluative letter grade.

## Foreign Language Requirement

Each candidate must satisfy the foreign language requirement by demonstrating proficiency in two scholarly languages, or one scholarly language and one field language, or one scholarly language and a two-semester sequence of prescribed statistics courses.

## Applied Anthropology Doctor of Philosophy

Each student, in collaboration with an advisor, develops a program of study in anthropology designed to establish a high level of competency. A minimum of 75 points of acceptable graduate credit is required for the Doctor of Philosophy.

Of these 75 points, a maximum of 45 points can be completed through another faculty of Columbia University, or a maximum of 30 points may be transferred in courses from other recognized graduate schools. Forty to forty-five points of major courses are required, of which 40 points must be Anthropology courses.

These courses prepare students with the requisite knowledge of epistemological, theoretical, methodological, ethnographic, and substantive areas of anthropology. They aim to develop competency in the discipline, while addressing the specific intellectual interests of the student.

At least 15 points of the anthropology requirements must be taken within the TC program. A minimum of 25 points of the 40 points required in anthropology must be taken at Teachers College, or in other faculties of Columbia University. Up to 15 points in anthropology courses may be taken at other graduate institutions which are members of the Inter-University Doctoral Consortium, to satisfy major course requirements.

Within the major course requirements, 27 points in required courses must be taken: the four-semester sequence of colloquia and summer field research (a minimum of 12 points); an additional theory course outside of the first semester colloquium (3 points); two ethnography courses, one within and one outside of one's interest (6 points); and two sub-discipline courses (6 points), one in linguistics and one from either archaeology or physical anthropology.

Fifteen points in research methods and statistical courses are also required. The remaining 15 points of electives are used to increase competence in comparative, regional, or international studies, or to enhance technical skills used in conjunction with but outside the major course of study. At least three of these courses ( $8-9$ points) must be taken in fields foundational to anthropology (economics, history, linguistics, philosophy, psychology, sociology). Of the 75 graduate points required for the degree, a minimum of 45 must be taken for an evaluative letter grade.

## Foreign Language Requirement

Each candidate must satisfy the foreign language requirement by demonstrating proficiency in two scholarly languages, or one scholarly language and one field language, or one scholarly language and a two-semester sequence of prescribed statistics courses.

## COURSES:

## Introductory Courses

## ITSF 4010. Cultural and social bases

 of education (3-4)Professor Comitas. Analyses of basic anthropological concepts, with particular reference to the sociocultural context of education and the role of educational institutions in community, national, and regional development. Fourpoint enrollment requires attendance at film showings before or after class and at discussion sessions held at hours to be arranged.

## ITSF 4011. Social context of education

 (3-4)Professor Bond. The exploration of anthropological and social science concepts for the analysis of educational, cultural, and social institutions, organizations, and processes of different peoples of the world. Four-point enrollment requires attendance at film showings before or after class and additional discussion sessions held at hours to be arranged.

ITSF 4012. Cross-cultural studies of learning (3-4)
Professor Harrington. Analyses of basic anthropological concepts, with particular reference to the influence of cultures and subcultures on the learning process, to education in
multicultural classrooms, and to the relevance of psychological anthropology to educational issues. Four-point enrollment requires attendance at film showings before or after class and additional discussion sessions held at hours to be arranged.

## ITSF 4014. Urban situations and education

 (3-4)Professor Bond. An introduction to the anthropological study of the sociocultural patterns of populations residing in urban settings, with emphasis on domestic, ethnic, class, and educational relationships.

ITSF 4016. Culture and society in Africa (3) Professor Bond. A general survey of subSaharan Africa, using contributions from theoretical approaches to anthropological research in the area. Emphasis on socioeconomic, ideological and religious, educational, and political analysis of African communities.

ITSF 4017. Anthropological perspectives on homelessness and social control (3) Faculty. Theoretical and ethnographic analyses of contemporary forms of social exclusion in urban settings. Emphasis on the interaction between institutional arrangements and the experience of homelessness.

ITSF 4018. Anthropology and development in Africa (3)
Professor Bond. This seminar considers issues and problems of development in sub-Saharan Africa. It examines specific development projects from different theoretical and empirical perspectives.

ITSF 4026. Technology and culture (3) Professor Varenne. An exploration of the impact of technology broadly defined upon cultural evolution as currently discussed in anthropology and related disciplines. Special fee: $\$ 30$. Also listed as MSTU 4028.

## Intermediate Courses

ITSF 5011. Process and change in Africa (3)
Professor Bond. Anthropological studies of social systems, cultural change, and development. Special emphasis on the role of politics, religion, economics, and education in change processes.

## ITSF 5012. Culture and society in

## the Caribbean (3)

Professor Comitas. Detailed survey, utilizing contributions from theoretical approaches to anthropological research in the area. Emphasis on socioeconomics, community studies, and sociopolitical analyses.

ITSF 5013. Psychological anthropology (3) Professor Harrington. The concepts, theories, and methods of psychological anthropology. Cross-cultural studies of learning processes. Emphasis on recent work in the field, prob-
lems of cross-cultural methodology, and the study of socialization.

ITSF 5015. Political anthropology:
Labor, race, and belief (3)
Professor Bond. This course considers the theories and concepts used by anthropologists and other social scientists in the analysis of political behavior and institutions. It emphasizes the comparative study of political systems, movements, and processes within the context of rural and urban situations.

ITSF 5016. Ethnography of education (3) Professor Varenne. Introduction to the ethnographic investigation of educative institutions (villages, neighborhoods, families, peer groups, schools, etc.) and to the policy issues it addresses.

ITSF 5018. Drugs and society (3) Professor Comitas. Utilizing theoretical and methodological perspectives from social and cultural anthropology, this course is designed to explore the contextual dimensions of illicit drug use as well as other drug-related issues. A comparative, cross-cultural approach will be utilized and case material drawn from traditional as well as modern settings.

ITSF 5020. Practicum in anthropological field techniques (3)
Professor Comitas. For anthropologists and non-anthropologists contemplating independent, qualitative research, this course provides hands-on experience in techniques for generating, recording, and managing anthropological data in the field.

## Colloquia

ITSF 5610. First-year colloquium in applied anthropology (3)
Professors Bond and Varenne. Permission required. This is a year-long critical review of important works in anthropology and education and applied anthropology. During the spring semester, students present proposals for their summer fieldwork before the members of both programs. Required of, and open only to, first-year doctoral students. Meets concurrently with ITSF 5611 during the spring semester.

ITSF 5611. Second-year colloquium in anthropological method (3)
Professors Comitas and Harrington. Permission required. This is a year-long review of the methods of field research and data analysis in anthropology, with special reference to educational systems and processes. Network analysis, systematic observation, quantification procedures, participant observation, ethnographic interview, use of film and videotape, cross-cultural survey techniques, and testing and experimental design. During the spring semester, students report on their completed summer fieldwork before the members of both programs. Required of, and open only to, secondyear doctoral students. Meets concurrently with ITSF 5610 during the spring semester.

## Research Seminars

ITSF 6510. Education and cultural production (3)
Professor Varenne. Seminar reviewing theoretical developments in culture theory as it focuses on education as the foundation of cultural production.

## ITSF 6511. Seminar in psychological

 anthropology (3)Professor Harrington. Permission required. Prerequisite: ITSF 5013. A research seminar focusing on current issues in psychological anthropology.

ITSF 6512. Social theory and structure (3) Professor Bond. Investigation of issues and problems in social theory through the analysis of relevant literature in the social sciences.

ITSF 6513. Topics in anthropology and education: Exploration of a selected topic in anthropology (1-4)
Faculty. Permission required. Topics vary each semester and may include any of the following: Cultural analysis, social structure, religion and politics in contemporary Africa, resilience in at-risk populations, anthropology and the law, and world ethnography.

ITSF 6517. Peasants, politics and development in Africa (3)
Professor Bond. The purpose of this seminar is to explore the theoretical and empirical paradigms that anthropologists and other social scientists have used to represent and analyze African peoples.

ITSF 6911. Workgroup in psychological anthropology (0-1)
Professor Harrington. This workgroup meets every other week to discuss current issues in psychological anthropology. It also discusses and reviews current research and proposals for research of workgroup members, including faculty, alumni, and doctoral students concentrating in psychological anthropology.

## Individualized Studies

Advanced students may register for intensive individual study of some aspect of their concentration. Registration is only by permission of the instructor under whose guidance the work will be undertaken. Times for individual conferences will be arranged. Enrollment may be for 1 or more points each term, and registration is not limited to one or two terms.

ITSF 4900. Research independent study anthropology and education (1-8)

ITSF 6900. Research independent study anthropology and education (1-8)

ITSF 6910. Studies in anthropology and education (1-8)

## INTERNATIONAL AND <br> Comparative Education Programs

The two international education programs provide advanced preparation for professional careers in a wide range of teaching, policy and evaluation, administrative, and research roles. Students may combine their studies with other areas of concentration offered throughout the College.

Program Coordinator:
Professor Regina Cortina
Program Office: (212) 678-3184
Email: iedcieinfo@tc.columbia.edu Website: http://www.tc.edu/its/CIE\&IED

Teachers College offers two programs in international education:

## COMPARATIVE AND INTERNATIONAL EDUCATION, AND INTERNATIONAL EDUCATIONAL DEVELOPMENT

Prospective students should visit the website and email the program assistant, for more information (iedcieinfo@tc.columbia.edu).

## Description of the Two Programs:

In 1899, Teachers College became the first graduate institution in the United States to develop a program in comparative education. The Program faculty were co-founders of the Comparative and International Education Society in 1956 and edited the Society's journal, Comparative Education Review, for many years.

In the 1960s, Teachers College also became instrumental in the study of the international development of education, founding the program in International Educational Development. The faculty of the programs continue to be active in conducting research and participating in educational activities around the world.

Graduates of the programs are found in numerous positions, including academic research and teaching, educational planning, project design and evaluation, program management in foundations, nongovernmental organizations, governmental organizations, businesses and corporations, and private and public educational institutions.

The primary distinction between the two programs is the area of concentration leading at the doctoral level to the Ph.D. for Comparative and International Education students and to the Ed.D. for International Educational Development students: Students applying for Comparative and International Education need to select a discipline focus
(anthropology, economics, history, sociology, philosophy, or political science), whereas students in International Educational Development select a concentration within the field of education (for example, African Education, Bilingual/Bicultural Education, Finance and Planning, International Education Policy Studies, etc.). Approximately one-third of the courses are to be taken in the area of concentration. The courses offered in concentrations vary each academic year. A few concen-tra-tions are not available at the doctoral level, as noted in their description below.

Students in both international education programs are encouraged to select a geographical area of specialty. Geographical areas currently represented by faculty in the Department of International and Transcultural Studies are: Africa, the Caribbean, Central Asia, East Asia, Europe, Latin America, the Middle East, South Asia, and the U.S. (for a transcultural/immigration focus). Most area studies courses are available at the School of International and Public Affairs and in discipline-based departments at Columbia University to which students in international education have access.

Applications are reviewed once a year to begin in the fall semester only. The deadlines for applications are in December or January depending on the degree program.

## COMPARATIVE AND INTERNATIONAL EDUCATION

## Degrees Offered:

## COMPARATIVE AND INTERNATIONAL EDUCATION (COMP)

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Philosophy (Ph.D.)
Up to 30 graduate-level credits can be transferred into the Ed.M. and Ph.D. degree programs.

Areas of concentrations offered inside the Department of International and Transcultural Studies:

- Anthropology

The following presents a description of concentrations in Comparative and International Education offered in the department.

## Anthropology

The concentration in Anthropology offers a disciplinary approach that carefully explores and con-
tributes to the analysis and understanding of educational processes in schools and classrooms, in families, on street corners, in community centers, in churches and in all settings where education may proceed. In addition, the concentration offers coursework in the application of anthropological knowledge and approaches to matters of policy concern in ecological and environmental change, economic and community development, education, immigration, institutional programs, literacy, psychiatry, and psychoanalysis.

The list of courses offered in anthropology can be found under the degree programs, listed in this section of the catalog.

Areas of concentrations offered outside the Department of International and Transcultural Studies:

- Economics
- History
- Philosophy
- Political Science
- Sociology

The courses for these areas of concentration in the Comparative and International Education program-offered outside the department-can be found under the respective degree programs, listed in other sections of the catalog.

The Ph.D. program in Comparative and International Education includes a foreign language requirement as well as comprehensive training in research methods and data analysis. $\mathrm{Ph} . \mathrm{D}$. students are expected to take some of the courses in their discipline at the Graduate School of Arts and Sciences, Columbia University.

## INTERNATIONAL EDUCATIONAL DEVELOPMENT

## Degrees Offered:

INTERNATIONAL EDUCATIONAL DEVELOPMENT (INTL)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

Up to 30 graduate-level credits can be transferred into the Ed.M. and 45 credits into the Ed.D. degree programs.

Areas of concentrations offered inside the Department of International and Transcultural Studies:

- African Education
- Family and Community Education
- Finance and Planning
- International Education Policy Studies
- International Humanitarian Issues
- Language, Literacy and Technology
- Latin American and Latino Education
- Peace Education

The following presents a description of concentrations in International Educational Development.

## African Education

The concentration in African Education reflects the growing demand within schools and other public agencies for persons knowledgeable about the diverse institutions and historical processes that have shaped the African continent and its educational systems. There is also an unprecedented need for educators and policy makers who understand the fundamental changes in African education stemming from decentralization, democratization, and privatization as well as religious and political movements on the continent. The concentration provides students with a foundation in African studies through courses on cultural and social relations in African communities, demographic changes on the continent, and comparative studies of education in specific African countries. Those who select this concentration will be prepared for further academic studies as well as for professional careers in teaching, policy-making, and international development. Through courses offered at Teachers College, the School of International and Public Affairs, the Mailman School of Public Health, and other Columbia-affiliated institutions, students will examine the multiple dimensions of African studies as they relate to the cultural, economic, social, and political dimensions of education in Africa and the African Diaspora.

Coursework in these different departments and programs will allow students to explore from an interdisciplinary perspective the role of formal and non-formal education in a broad range of development issues affecting people of African descent. Students should consult with one of the faculty members affiliated with the concentration to select courses from appropriate departments at Teachers College as well as from other programs at Columbia University.

Faculty affiliated with the concentration: George Bond (liaison).

## Bilingual/Bicultural Education

This concentration enables students to develop the understanding necessary to educate language minorities throughout the world. It focuses on individual and societal bi/multilingualism as well as the influence of cultural and linguistic diversity in the design of educational systems and classroom instruction. For more information, please see the section titled Bilingual/Bicultural Education.

Faculty affiliated with the concentration: JoAnne Kleifgen, and Lesley Bartlett.

## Family and Community Education

Teachers College continues its long history of groundbreaking work through the concentration in Family and Community Education. In all societies, individuals learn from many others in their social networks, e.g., parents, siblings, grandparents, peers, clergy, as well as teachers, and other professionals. What is more, education takes place through many institutions, e.g., families, day-care centers, businesses, the media, museums, libraries, community agencies, religious institutions, as well as the schools.

Since the configurations of these educational networks and institutions are subject to change sometimes drastically-as in the case of new technological enterprises, studies in Family and Community Education examine the changing linkages among educative institutions in the community. Fundamental changes in education also stem from the extensive transnational migration and immigration taking place in many areas of the world today. Given increasing geographic mobility, together with new forms of communication, an understanding of the connections between local and global cultures, and the resources families and communities bring from one area to another is essential for educators and policy makers. Thus, another focus of study is family migration, immigration, and education.

Courses examine basic processes of education within families, for example, the social construction of family memories, the mediation of televi-
sion and other forms of technology by families, as well as the changing configurations of education in community settings, for example, linkages among museums, families, and schools.

Faculty affiliated with the concentration:
Hope Jensen Leichter (liaison) and
Hervé Varenne.

## Finance and Planning

The Finance and Planning concentration is devoted to the preparation of researchers, policy analysts, as well as managers and leaders in the financing and planning of education. The courses are designed to examine issues and topics central to the financing and planning of education at various levels across countries today and in the new century. These issues and topics include financing quality basic education for all, equity and efficiency in financing, higher-education finance, privatization and educational choice, international aid and education, decision analysis and planning in education, as well as the international and transcultural contexts of educational financing and planning.

The concentration is intended for students who will pursue a career dealing with financial and planning aspects in a variety of education settings, including schools and universities, government education departments and ministries, international development organizations, as well as non-profit and community organizations. In addition to required courses, students can select relevant courses from departments such as Organization and Leadership, Arts and Humanities, as well as from the larger university.

Faculty affiliated with the concentration: Mun C. Tsang.

## International Humanitarian Issues

The International Humanitarian Issues (IHI) concentration is an interdisciplinary specialization. It is designed for students interested in conducting research on humanitarian issues or in providing humanitarian assistance in regions experiencing conflict, post-conflict recovery, or natural disasters. Through courses offered at Teachers College, the School of International and Public Affairs, the School of Social Work, the Earth Institute, and the Mailman School of Public Health, students will examine the social, political, environmental, and economic dimensions of humanitarian emergencies and the impact of these emergencies on the education sector. Coursework in these different departments and programs will allow students to explore from an interdisciplinary perspective the role of formal and non-formal education in periods of conflict and crisis, and to consider the limitations of education in resolving different kinds of humanitarian emergencies.

Students in the IHI concentration will plan an appropriate course of study with their advisors, but they are required to take at least six credits within the Department of International and Transcultural Studies at the master's level and nine credits at the doctoral level. They are also strongly advised to take courses from at least two of the institutions listed above. Additionally, at the doctoral level, students are recommended to complete an internship with an organization involved in humanitarian issues.

Faculty affiliated with the concentration: Lesley Bartlett (liaison) and Monisha Bajaj.

## International Education Policy Studies

The International Education Policy Studies concentration is interdisciplinary and encompasses a wide range of local and global perspectives in the field of international educational development. Courses are taught with attention to multiple paradigms and worldviews to prepare future scholars to engage in the work of policy analysis, formation, and study. Faculty who teach education policy courses come from a variety of academic disciplines across the College, such as anthropology, economics, law, political science, psychology, and sociology. There are also faculty who work in interdisciplinary areas, such as early childhood education, family and community education, public health, education leadership, and international educational development. The International Education policy concentration follows the same approach to policy studies as the College-wide Policy Studies courses: students learn about the craft of policy making and analysis, acquire content and historical background information, enroll in content-driven policy courses, and take research methodology courses. Policy methods courses are offered throughout TC, and students are required to take a combination of both qualitative and quantitative courses. Most courses in this concentration focus on school reform in the United States and abroad.

Students must meet with their advisors to select appropriate policy related courses from across the College or at one of the other Columbia schools. Many courses are offered by the departments of International and Transcultural Studies, Organization and Leadership, and Human Development at Teachers College.

Faculty affiliated with the concentration: Gita Steiner-Khamsi (liaison), Lesley Bartlett and Hope Jensen Leichter.

## Concentration in Latin American and Latino Education

Latin American and Latino Education (LALE) is an interdisciplinary concentration focused on education across the Americas. Responding to the importance of the Latin American and Caribbean region as well as the growing number of immigrants from that region to the United States, this concentration provides students with a foundation in Latin American/Latino studies through courses that consider topics such as: the impact of economic processes on education in the region; language policy in schools; the social, cultural, and political dimensions of education, ethnicity, and academic achievement; gender and social change; educational access and quality; teacher preparation and curricular development; patterns of migration within and between countries in the Western hemisphere; intercultural education; and the impact of international and bilateral educational policies and institutions on educational policy and practice in the region. Students are also encouraged to pursue relevant coursework at the School of International and Public Affairs, the Mailman School of Public Health, and other Columbia-affiliated institutions to examine the variety of linguistic, cultural, social, political, and economic processes that shape education across the Americas.

Faculty affiliated with the concentration:
Regina Cortina (liaison), Lesley Bartlett, Lambros Comitas, Jo Anne Kleifgen and Hope Leichter.

Language, Literacy and Technology
This concentration systematically brings together social studies of language from three interrelated vantage points:

- Discourse Studies
- Literacy Studies
- Multimodal Discourse and Literacies

We are concerned with educational problems faced by immigrant families and by speakers of minority languages and varieties; with the development of cross-national computer-mediatedcommunication skills; with the design of com-puter-supported learning materials for language and literacy; and with bringing knowledge about human communication to bear on problems of understanding within and across groups such as families, community, workplace, national, and international entities.

Students specializing in this field may focus on areas such as the teaching of English in international settings, the education of speakers of minority languages and language varieties, literacy practices around the world, the development of literacy in the first and second language, and language policy and planning in the U.S. and abroad. Those interested in the relationship
between language and technology may focus on areas such as language and the Internet, multimodal discourses and literacies, and the design and evaluation of multimedia materials.

In addition to the courses listed under this concentration, students can select relevant courses from Anthropology within this department, from other departments such as Mathematics, Science and Technology, and Arts and Humanities as well as from the larger university.

Faculty affiliated with the concentration: JoAnne Kleifgen (liaison), Lesley Bartlett and Hervé Varenne.

## Peace Education

In recognition of the unprecedented dimensions of issues of security, war and peace, human rights and global justice, and sustainable development in a world of violent conflict, the department has developed a concentration in Peace Education. Peace Education is primarily concerned with addressing direct and structural violence through the transformation of pedagogy, curriculum, and policy related to education in both formal and nonformal contexts. Through the concentration, students are provided with a conceptual understanding of issues related to peace and human rights as well as practical skills in curriculum development. Students are required to take two core courses in Peace Education and, in addition, can select courses related to peace, security, conflict resolution, human rights, and global justice offered throughout the College and within other programs at Columbia University, Jewish Theological Seminary, and Union Theological Seminary.

Faculty affiliated with the program:
Monisha Bajaj (liaison) and Lesley Bartlett.
Areas of concentrations offered outside the Department of International and Transcultural Studies:

- Adult Education
- Conflict Resolution
- Curriculum and Teaching
- Educational Leadership
- Higher Education
- Organizational and Social Psychology (only at M.A. and Ed.M. level)

The courses for these areas of concentrations in the International Educational Development program-offered outside the department-can be found under the respective degree programs, listed in the catalog. Note that any program offered at Teachers College qualifies, in principle, as an area of concentration for the International Educational Development program.

## Special Application <br> Requirements/Information:

Applicants to the master's and doctoral degree in the international education programs should indicate their area of concentration and a geographical area or transcultural topic of interest on their application for admission. These concentrations are not binding, and enrolled students are at liberty to change their concentration and specialty at the beginning of their studies.

Applicants to the Ed.M., Ph.D., and Ed.D. programs must have a Masters degree. Doctoral applicants must submit an academic writing sample and should arrange if possible for an interview prior to applying. Applicants for the Ph.D. program in Comparative and International Education are expected to have already completed some coursework in the discipline they select as their concentration.

## Application deadlines:

M.A., Ed.M.: January 15

Ed.D.: January 2
Ph.D.: December 15

## Degree Requirements:

The programs are designed to provide students with challenging coursework related to international and transcultural dimensions of education. Requirements include work in four areas: a core curriculum, a concentration that is either a discipline (for Comparative and International Education) or a professional field of education (for International Educational Development), transcultural or geographically related study, and elective credits.

The program arrangements are designed to be as flexible as possible so that previous educational and professional experiences and the future career goals of the student may be taken into account in the choice of appropriate coursework. Each student is expected to assume major responsibility for formulating, in cooperation with the academic advisor, a plan of study that will best meet the general program requirements in a way most compatible with her/his own professional goals. Keep in mind that degrees are offered only by program, that is, applicants need to specify to which of the two international education programs they are applying.

## Master of Arts (32 points)

Core Courses: 6 points, (ITSF 4090 or ITSF 4091 and a second course: ITSF 4090, ITSF 4091, ITSF 4025, or ITSF 4051)

- Concentration Courses:

12 points (in an academic discipline for Comparative and International Education or in a professional field of education for International Educational Development, as listed in the Program Description above)

# INTERNATIONAL and Transcultural 

- Transcultural/geographical area studies: 6 points
- Electives: 8 points
- Each M.A. candidate must complete a special integrative project, demonstrating the ability to integrate, synthesize, and apply what has been learned in the program of study.


## Master of Education ( 60 points)

Core Courses: 9 points (ITSF 4090 or ITSF 4091 and a second course: ITSF 4090, ITSF 4091, ITSF 4025, or ITSF 4051, and one additional department course)

- Concentration Courses:

18 points (in an academic discipline for Comparative and International Education or in a professional concentration for International Educational Development, as listed in the Program Description above)

- Transcultural/geographical area studies: 18 points
- Electives: 15 points
- Ed.M. degree candidates must complete a special integrative project designed to illuminate a major aspect of the program of study.

Doctor of Education (90 points)
(International Educational Development only) Core Courses: 12 points. (ITSF 6580,
ITSF 6581 and two additional ITSF courses)

- Courses in a field of professional concentration: 27 points
- Transcultural/geographical area studies: 27 points
- Electives: 24 points


## Doctor of Philosophy ( 75 Points)

(Comparative and International Education only) Core Courses: 9 points. (ITSF 6580 and ITSF 6581 and one other ITSF course)

- Courses in an allied discipline: 30 points
- Transcultural/geographical area studies: 18 points
- Electives: 18 points

For further program information, contact the Programs in International Education, Teachers College, Columbia University, Box 55, New York, N.Y. 10027, call (212) 678-3184 or email iedcieinfo@tc.columbia.edu.

## COURSES:

For courses in the concentrations of the Comparative and International Education program and in out-of-department concentrations of both international education programs, please check the appropriate programs and departments for course descriptions.

## Core Courses

ITSF 4025. Languages, society and schools (3)
Faculty. This course studies the role that languages play in different societal contexts. It examines the language policies of different societies and looks at how these policies are enacted or not in different institutional contexts by diverse speakers. In doing so, the course pays attention to diverse language ideologies as well as to the relationship between language and identity. Languages and literacies in schools, especially educational language policy in multilingual contexts, receive special consideration.

ITSF 4090. Issues and institutions in international educational development (3) Professors Bajaj, Bartlett, and Steiner-Khamsi. This course explores theoretical approaches to the study of education in international development and uses these approaches to consider current topics and debates in the fields of international and comparative education. This course also introduces students to institutions involved with educational development in diverse global settings, such as the United Nations and the World Bank. This course is also offered at the doctoral level (ITSF 6581).

ITSF 4091. Comparative education (3)
Professors Bajaj, Bartlett, Cortina, and SteinerKhamsi. Introduction to theories in comparative education, cross-national comparative analysis, educational indicator research, educational transfer and borrowing, and the relation between culture and education. This course is also offered at the doctoral level (ITSF 6580).

## General Courses

Note that general courses are not offered every year.

ITSF 4005. Education in emergencies and reconstruction (3)
Faculty. This course provides students with a comprehensive introduction to the growing and increasingly complex field of education in emergencies, one which encompasses crises caused by natural disasters and armed conflict and which spans the relief-development spectrum.

ITSF 4013. Literacy and development (3) Professor Bartlett. This course examines common assumptions about the relationship between literacy and cognitive and/or social, political and/or economic development.

ITSF 4014. Urban situations and education (3-4)
Professor Bond. See course description under Anthropology course listing.

ITSF 4015. Introduction to computers, language and literacy (2-3)
Professor Kleifgen. Sociocultural implications of computer use in education; viability of software use in the light of language learning theories; evaluation of electronic materials for use by bilingual, ESL, and native - and foreignlanguage learners. Materials fee: $\$ 20$.

## ITSF 4018. Anthropology and development

 in Africa (3)Professor Bond. See course description under Anthropology course listing.

ITSF 4025. Languages, society, and schools (3)

Faculty. This course studies the role that languages play in different societal contexts. It examines the language policies of different societies and looks at how these policies are enacted or not in different institutional contexts by diverse speakers. In doing so, the course pays attention to diverse language ideologies as well as to the relationship between language and identity. Languages and literacies in schools, especially educational language policy in multilingual contexts, receive special consideration.

## ITSF 4034. Dynamics of family interaction

 (3)Professor Varenne. An introduction to communication patterns inside families, with a special emphasis on both their complexity at the interpersonal level and their simplicity within the social structure of a community. Class time is dominated by cross-cultural data on family structure and videotape analyses of communication patterns within American families.

ITSF 4054. Education and strategic planning (3)

Faculty. Educational planning within the context of national economic planning; the methods, assumptions, validity, and usefulness of the major approaches; examples mainly from the less developed countries.

ITSF 4092. Qualitative research and evaluation in international education (3 or 5) Professor Steiner-Khamsi. The study of qualitative methodologies appropriate to various kinds of educational programs, issues, and problems in diverse research settings.

ITSF 4093. International educational development: Curriculum and pedagogy (3) Faculty. This course explores the problems, issues, and approaches in the development of curricula, preparation of instructional materials, and training of educators internationally.

ITSF 4094. Educational planning in international educational development (1-3) Faculty. Point allocation to be determined by topic each time course is offered. Topic courses explore issues related to the socioeconomic and cultural context of educational planning and policy studies. They consider the relation to specific issues of various approaches to planning and their attendant outcomes. Topics vary and may include any of the following, Education in the Middle East, Educational Development in the Muslim World, Emergency Education, Gender, Education, and International Development, Human Rights, International Education Policy, and Education in Post-Conflict Settings.

ITSF 4096. Strategic planning and organizational change in international and national settings (3)
Professor Steiner-Khamsi. The seminar uses theories and methods of social network analysis for examining regional and global policy networks. Besides reading and discussing sociological texts and policy studies literature, we will conduct collaborative empirical analyses of policy networks and policy entrepreneurs. Willingness to conduct empirical research (content and reference analyses) is a condition for participating in this seminar.

## ITSF 4098. Educational development and policies in China (3)

Professor Tsang. Historical and national development contexts of educational development in China. Key policy issues in education by level and across levels.

## ITSF 4160. Human rights education in

Africa: Politics, policies, and pedagogies (3)
Faculty. Students examine the historical conditions that give rise to human rights violations and the efforts to protect rights through policy and education. They explore different approaches to human rights education, apply them to case studies of specific African countries, and develop human rights education curricula.

ITSF 4190. Communicative practices: Intercultural perspectives (2-3)
Professor Kleifgen. A topical course exploring language as situated social practice and focusing on communication within and across national boundaries. Domains examined include schooling, work, community, and the public arena. Both spoken and written modes are considered.

ITSF 4195. Academic literacies (2-3) Faculty. This course is designed to help students develop the professional knowledge and skills necessary for effective communication through such genres as research projects, conference presentations, contributions to journals, grant proposals, and evaluation reports.

ITSF 4603. Human and social dimensions of peace (3)
Professor Bajaj. This course focuses on issues of human rights, global ethics, and various aspects of structural and cultural violence. Students are introduced to examples of nonviolent social movements and reflect on the process of peaceful transformation. Another course in human rights may be substituted for the concentration in peace education.

ITSF 4611. Education for global security (3) Not offered every year.
Faculty. Explores issues of peace and violence from various perspectives, among them global security culture and militarism. Emphasizes alternative security systems such as disarmament, international and gender justice, ecological and human security. Not offered every year.

ITSF 4613. Fundamental concepts in peace education (3) Not offered every year. Professor Bajaj. This course provides a grounding in the theory, pedagogy, and practice of peace education. It draws from the international literature of the field as it has been developed over the past three decades, and reviews teaching practices relevant to various cultures and learning settings. Not offered every year.

ITSF 4614. International organizations, civil society, and peace education (3) Not offered every year.
Faculty. This course reviews and assesses the work of the world organization and how it facilitates the learning necessary to an integrated global society. The area of emphasis and problem of focus vary from semester to semester. Not offered every year.

ITSF 5000. Methods of inquiry: Ethnography and participant observation (3)
Professor Harrington. See course description under departmental course listing.

ITSF 5001. Ethnography and participant observation: Fieldwork, analysis, reporting (3)
Professor Varenne. Permission required. ITSF 5000 or equivalent required. See course description under departmental course listing.

ITSF 5002. Ethnography and participant observation: Comparative and quantitative analysis (3)
Professor Harrington. Permission required.
ITSF 5000 or equivalent required. See course description under departmental course listing.

ITSF 5003. Communication and culture (3) Professor Varenne. Introduction to major theories of human communication and culture as they relate and build on each other.

## ITSF 5005. Interdisciplinary study of

 the family (3)Professor Varenne. Critical examination of the interaction of internal and external forces and their effects upon individuals and families, drawing upon perspectives of various social science disciplines.

ITSF 5006. International educational policy studies (3)
Professor Steiner-Khamsi. This course helps students to understand the rationale and to apply the techniques underlying education sector strategies of low-income governments.

ITSF 5007. Race, class, and schooling: Ethnographic approaches (3)
Professor Bartlett. This course examines the role of schooling in the formation of race and class structures across the Americas, including Latin America, the Caribbean, and the United States.

ITSF 5008. Gender, education, and international development (3)
Professor Cortina. In this seminar students will be introduced to education and social issues in Latin America and the Caribbean since the consolidation of national systems of public education during the twentieth century.

ITSF 5023. The family as educator (3) Professor Leichter. Permission required. Analysis of the family as educator and its interrelations with schools and other educational institutions. Emphasis on inquiry deriving from educational practice and behavioral science theory.

ITSF 5026. The family and television (3)
Professor Leichter. Permission required. An analysis of the impact of television on the family's educative functions, with special attention to the process by which the family mediates television.

ITSF 5033. African diasporic languages and education (2-3)
Professor Kleifgen. Explores language, literacy and educational development associated with speakers of African and Creole languages and

African American English. It addresses theoretical and pedagogical concerns and their political consequences in these language communities.

## ITSF 5090. Education and demographic

 change (3)Faculty. This course examines the relationship between education and demographic change in international educational development. It focuses on historical and cultural changes in the areas of fertility, migration, mortality, and sustainable development.

ITSF 5094. Reading development policy through practice (3)
Faculty. This intensive field-based course provides students with a unique opportunity to engage in qualitative analyses of educational policy, pedagogy, and practice. Qualitative techniques, through the methods of interviewing, observing, and document analysis, are employed to explore the meanings that policies hold for different groups of actors, including policymakers, educators, activists, parents, and children. Policies are then contrasted to practices in a wide variety of settings. Through this course, students will gain a greater understanding of the assumptions about economic, political, and educational development underlying national and international policy as well as local practice. The goals of the course are to expand students' skills in the area of policy analysis and to enhance their awareness of the complexity of policy implementation at the local level.

## ITSF 5120-ITSF 5121. Education in

community settings (2-3)
Professor Leichter. Permission required. A review and an analysis of educational issues and opportunities in various community settings. Special fee: $\$ 5$.

- ITSF 5120. Museums (2-3)
- ITSF 5121. Community centers (2-3)

ITSF 5500. Education across the Americas (3)

Professor Cortina. In this course students will be introduced to education and social issues in Latin America and the Caribbean since the consolidation of national systems of public education during the twentieth century.

## ITSF 5519. Research in language

 and literacy I (2-3)Faculty. Research in such areas as spatial, temporal, textual, and social deixis in language, with particular attention to culturally variant norms and their implications for educational practice. Materials fee: $\$ 20$.

## ITSF 5520. Research in language and literacy II (2-3)

Faculty. Research in the varieties of language used in literate expression, with particular attention to culturally variant norms and their implications for educational practice. Materials fee: $\$ 20$.

ITSF 5580. Postcolonial studies of education (2-3)
Professor Steiner-Khamsi. Prerequisites or corequisites: ITSF 4090 and ITSF 4091. This course explores the impact of missionary, colonial education, and neo-colonial education on school reform both in dependent countries and in former colonial countries.

ITSF 5590. Education and the development of nations (3)
Professors Bajaj. Prerequisites: ITSF 4090/6580 or ITSF 4091/6581. This seminar explores the politics of education in international and transcultural contexts. Course topics include educational equity and quality as well as the role of international donors in transplanting particular "best practice" or reform packages from one national context to another.

ITSF 5691. Colloquium on international education and the United Nations-Goals and content: Major world developments and their implications for education (3)
Professor Steiner-Khamsi. The course presents the history as well as the current strategies and initiatives of various international organizations. The general introduction attempts to highlight, from a critical perspective, the logic of donors and the rationale for external assistance. Several trends will be analyzed in greater detail: knowledge banks, demands for good governance, post Cold War studies, south-south transfer, and the War on Terror and U.S. assistance. To enable a comparative perspective, international organizations discussed in this course are not restricted to U.N. organizations but also include development banks, international NGOs, bilateral assistance programs as well as other international organizations. A few representatives of international organizations are invited as guest speakers.

ITSF 5692. Colloquium on international education and the United Nations- Theory and teaching techniques: New trends in international education (3)
Faculty. Permission required. Enrollment limited. Through class interchange and use of United Nations human and material resources, participants develop innovative teaching materials suitable for their own educational systems.

## ITSF 6125. Research issues in

communicative practices (2-3)
Professor Kleifgen. A critical review of selected research directions and paradigms for the analysis of spoken and written communication.

## ITSF 6520. Seminar in families

and communities as educators ( $1-3$ )
Professor Leichter. Permission required.
A research seminar in the family and the community as educational systems.

ITSF 6580. Advanced seminar in international education I (3)
Professors Bajaj, Bartlett, Cortina, and SteinerKhamsi. This course will focus on the history,
methods and theories in the field of international and comparative education.

ITSF 6581. Advanced seminar in international education II (3)
Professors Bajaj, Bartlett, Cortina, and SteinerKhamsi. This course will focus on issues, institutions, and applications in the practice of international and comparative education.

ITSF 6590. Doctoral seminar in international and transcultural studies (1-3) Faculty. Permission required. Presentation of research in progress and examination of professional roles.

## DEPARTMENTAL COURSES

ITSF 4060. Latinos in urban schools (3)
Faculty. Students will be introduced to theories and research explaining why Latinos in the United States are least likely of all major social groups to be enrolled in school and, as adults, are most likely to lack a high school diploma. The course will explore the racial/ethnic differences that exist between and within recent immigrant groups, drawing especially on research that shows the diversity of cultural backgrounds within Latino subgroups. Topics will include assimilation of new immigrants, educational achievement and persistence in school, language and schooling, the interplay of race and gender and class with educational attainment, and transitional communities.

ITSF 4195. Academic literacies (2-3)
Faculty. This course is designed to help students develop the professional knowledge and skills necessary for effective communication through such genres as research projects, conference presentations, contributions to journals, grant proposals, and evaluation reports.

ITSF 4600. Group studies in educational issues (1-3)
Faculty. Permission required. Opportunity for groups to organize colloquia, seminars, or practica, with faculty sponsorship, for the study of specific educational issues, problems, or policies, and for the development of particular skills, in accordance with emerging social situations and urgent common concerns. Students wishing to engage in such studies must present a plan and secure the sponsorship of a faculty member of the department who will serve as advisor. Registration and evaluation procedures will be worked out and carried through with this advisor.

## ITSF 5000. Methods of inquiry:

Ethnography and participant observation (3) Professor Harrington. The methods of the behavioral and social sciences as they relate to ethnography and participant observation. Emphasis on the role of theory, characteristics and relative efficiencies of various research techniques, and the importance of integrated research design.

ITSF 5001. Ethnography and participant observation: Fieldwork, analysis, reporting (3)

Professor Varenne. Permission required. ITSF 5000 or equivalent required. Emphasis on the issues arising out of ethnographic research as they arise during a pilot project from entry into the field to the writing of the results.

ITSF 5002. Ethnography and participant observation: Comparative and quantitative analysis (3)
Professor Harrington. Permission required. ITSF 5000 or equivalent required. Issues of comparative and quantitative analysis of data generated by ethnographic/participant observation inquiries.

ITSF 5430. Internship (1-6)
Faculty. Permission required. Supervised experiences in diverse settings designed to develop skills in research, development, planning, and evaluation.

ITSF 6200. Field research outside the United States (0) Faculty. Permission required. Required of doctoral students when choice of doctoral research necessitates data generation in other countries. One year of field experience under supervision in approved geographical and institutional site. Students secure approval of department chair and principal advisor in advance and render periodic reports.

ITSF 7500. Dissertation seminar in international and transcultural studies ( $0-3$ ) Faculty. Permission required. Proposal writing. Required of doctoral students in the semester following successful completion of certification examinations.

ITSF 8900. Dissertation advisement in international and transcultural studies (0) Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

In each of the areas within the department, advanced students may register for intensive individual study of some aspect of their concentration. Registration is only by permission of the instructor under whose guidance the work will be undertaken. Times for individual conferences will be arranged. Enrollment may be for 1 or more points each term, and registration is not limited to one or two terms.

See courses below:
ITSF 4902. Studies in international and transcultural studies (1-8)

ITSF 6902. Studies in international and transcultural studies (1-8)

ITSF 6950. Studies in economics and education (1-8)

ITSF 6990. Studies in international educational development (1-8)

ITSF 6991. Studies in comparative education (1-8)


# Mathematics, Science, and Technology 

## PROGRAMS:

COMMUNICATION, COMPUTING, AND TECHNOLOGY IN EDUCATION 173<br>Communication<br>Computing in Education<br>Instructional Technology and Media<br>Technology Specialist

MATHEMATICS EDUCATION 181

SCIENCE EDUCATION 186


## DEPARTMENTAL MISSION:

Mathematics, Science, and Technology programs focus on issues of educational practice and related professions in mathematics, science, technology, and cognate human sciences, including the relationships among these disciplines. Our modern world has been transformed by the achievements in pure and applied disciplines grounded in mathematics, science and technology. Current reforms in education place increasing significance on broadbased public understanding of these three fields of human endeavor. The study of communication and technology in education is broadly based and enriched by cultural and historical wisdom that provides a scholarly perspective on the role of media and technology in society and particularly in educational subject areas. Within this unifying view, the Department of Mathematics, Science, and Technology includes specialized programs to address the needs of professional practitioners in each area.

The Department incorporates the programs in three areas: Mathematics Education; Science Education; and Communication, Computing, and Technology in Education. The Mathematics and Science Education programs include scholars who address the preparation of mathematics and science teachers and teacher educators and focus particularly on the acquisition of scientific and mathematical literacy to foster future development of science and technology; the understanding of environmental sciences, and improved global stewardship of the environment and the link between science and society; the use of computers, computer modeling, and instrumentation in mathematics and science instruction. These scholars have extensive international experience in their subject-matter disciplines and in educational theory and practice.

The Program in Communication, Computing, and Technology in Education (CCTE) provides a cluster of degree programs for students who seek to develop leadership capacities for use of information and communication technologies in education across subject domains. The programs prepare candidates for leadership roles in integrating digital technologies into education and society, and for entry into creative work in the educational uses of new media. CCTE doctoral programs develop scholars who use the social and human sciences to study how applications of advanced technologies in education act as powerful social and historical forces, empowering educators to seek new solutions to established problems. Graduate study in CCTE is tightly integrated with design and implementation projects situated in several externally funded centers and institutes at Teachers College and Columbia University. This program is led by faculty with extensive international experience and also links the College to ongoing university initiatives in communication and information technologies. Faculty and students of this program examine technology as well as the role of computers and other media of communication on education and the assessment of educational performance in a wide variety of institutional settings. The program includes areas such as literacy, teacher education, game theory, technology design, and culture.

Each program has a unique focus or perspective, but the faculty share common scholarly perspectives, educational ideals, and a strong commitment to the improvement of society through improved scholarly practice in the educating professions and enhancement of human potential.

## FACULTY:

## PROFESSORS:

O. Roger Anderson
(Science Education)
John Black
(Communication, Computing, and Technology
in Education; Cognitive Studies in Education)
Herbert Ginsburg
(Mathematics Education; Developmental
Psychology; Cognitive Studies in Education)
Charles K. Kinzer
(Communication, Computing,
and Technology in Education)
Jo Anne Kleifgen
(Communication, Computing, and
Technology in Education; International
Educational Development; Comparative
and International Education)
Bruce R. Vogeli
(Mathematics Education)
VISITING PROFESSORS:
Daniel Goroff
(Mathematics Education)
Neil Grabois
(Mathematics Education)
Henry Landau
(Mathematics Education)
Joseph Malkevitch
(Mathematics Education)
Henry O. Pollak
(Mathematics Education)
J. Philip Smith
(Mathematics Education)

## ADJUNCT PROFESSORS:

J. Peter Garrity
(Mathematics Education)
Susan Lowes
(Communication, Computing, and Technology in Education)

## ASSOCIATE PROFESSORS:

Alexander Karp
(Mathematics Education)
Xiaodong Lin
(Communication, Computing, and Technology in Education) Ellen Meier
(Communication, Computing, and Technology in Education)
Felicia Moore Mensah
(Science Education)
Ann Rivet
(Science Education)
Erica Walker
(Mathematics Education)
Lalitha Vasudevan
(Communication, Computing,
and Technology in Education)

## ADJUNCT ASSOCIATE PROFESSORS:

Fernand Brunschwig
(Science Education)
Donald Fulton
(Science Education)

## ASSISTANT PROFESSORS:

Christopher Emdin
(Science Education)
Joey Lee
(Communication, Computing, and Technology in Education) Sandra Okita
(Communication, Computing, and Technology in Education)

## ADJUNCT ASSISTANT PROFESSORS:

Nabeel Ahmad
(Communication, Computing,
and Technology in Education)
Janell Catlin
(Science Education)
Thomas Chandler
(Communication, Computing, and Technology in Education) Judith Cramer-Fendelman (Communication, Computing, and Technology in Education)
Amanda Gunning
(Science Education)
Angela Kelly
(Science Education)
Maritza Macdonald
(Science Education)
Meghan Marrero
(Science Education)
Lawrence Nartey
(Mathematics Education)
Robin Stern
(Communication, Computing, and Technology in Education)
Renhong Wang
(Science Education)

## SENIOR LECTURER:

Howard Budin
(Communication, Computing, and Technology in Education)

## LECTURERS

Yoo Kyung Chang
(Communication, Computing, and Technology in Education)
Frank Moretti
(Communication, Computing, and Technology in Education) Jessica Riccio
(Science Education)
Stuart Weinberg
(Mathematics Education)

## INSTRUCTORS:

Paul Acquaro
(Communication, Computing,
and Technology in Education)
Don Buckley
(Communication, Computing,
and Technology in Education)
Shawna Bú Shell
(Communication, Computing,
and Technology in Education)
Thomas A. Covotsos
(Science Education)
Cameron Fadjo
(Communication, Computing,
and Technology in Education)
Greg Hallman
(Communication, Computing,
and Technology in Education)
Daniel Hoffman
(Communication, Computing,
and Technology in Education)
Jin Kuwata
(Communication, Computing,
and Technology in Education)
Dominic Mentor
(Communication, Computing,
and Technology in Education)
Thomas Tavares
(Communication, Computing, and Technology in Education) Lance Vikaros
(Communication, Computing,
and Technology in Education)
For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin or visit us at www.tc.edu/ faculty.

## Mathematics, Science, and Technology

# Communication, Computing, and Technology in Education 

Program Coordinator:

Professor Charles Kinzer

| Program Office: | (212) 678-3344 |
| :--- | :---: |
| Fax: | (212) 678-8227 |
| Email: | TCCCTE@tc.edu |
| Website: www.tc.edu/mst/CCTE |  |

The Communication, Computing, and Technology in Education area of study includes the following programs: Communication; Computing in Education; Instructional Technology and Media; and Technology Specialist.

## COMMUNICATION

## Degrees Offered:

COMMUNICATION (TECM)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## COMPUTING IN EDUCATION

## Degrees Offered:

COMPUTING IN EDUCATION (TECP)
Master of Arts (M.A.)
COMPUTING IN EDUCATION. online (TECD)
Master of Arts (M.A.)

## INSTRUCTIONAL TECHNOLOGY AND MEDIA

## Degrees Offered:

INSTRUCTIONAL TECHNOLOGY AND MEDIA (TEIT)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## TECHNOLOGY SPECIALIST

## Degree Offered:

TECHNOLOGY SPECIALIST-
K-12 Initial Certification (TETS-INIT)
Master of Arts (M.A.)
TECHNOLOGY SPECIALIST- Track II:
K-12 InITIAL CERTIFICATION (TETT-INIT)
Master of Arts (M.A.)

## Program Description:

Communication, Computing, and Technology in Education (CCTE) provides a cluster of degree programs for students who seek to develop leadership capacities in the use of information and communication technologies in education and society. The program applies to all subject areas and serves students, staff, and faculty members who share a commitment as educators to use digital technologies to improve education at all levels. Work through CCTE should move simultaneously toward two poles of understanding and practice: toward a comprehensive understanding of the cultural and historical implications of new technologies for education and life, and toward purposefully selecting and shaping the uses of new media in educational practice at all levels and subject areas.

Communication, Computing, and Technology in Education aims to prepare students to deal with both present and future implications of new media and to play a constructive role in shaping the educational response to innovations in information and communication technologies. The CCTE Program encompasses the use of new media broadly in modern educational and public service arenas, including video, computer-based media, digital and nondigital game-based learning, and the role of communication and media in society from an historical and modern perspective.

CCTE's programs deal with the many ways in which material culture changes and shapes educational practice. Listed are current assumptions about the long-term effects that innovations in information, communication, and game technologies are having on education and culture. Work through CCTE should lead faculty and students to study, criticize, develop, and extend propositions such as these:

- With emerging intellectual demands and conditions, activities contributing to the creation of knowledge will increase in relative value, while those devoted solely to its dissemination will decrease.
- When changes in information and communication technologies transform the ways people create, disseminate, and apply knowledge, deep changes in educational practices occur.
- Educational institutions, including schools of education, will undergo prolonged change and significant transformation, occasioned by changes in the media of intellectual production.
- Literacy practices will become more central to active participation in information networks and modern life.
- Preservice education will need to focus more on the active integration of Information

Communication Technologies or ICTs into pedagogy and research.

- As digital information and communication technologies become more accessible, the separation of schools and higher education into two, largely distinct, educational cultures will markedly diminish.
- Campuses will remain important foci of intellectual activity, while participation in them will become more flexible via networks supporting asynchronous, distributed involvement.
- Specialists in education will need to work closely with scholars, scientists, and professionals to embed powerful learning experiences in digital technology for advancing knowledge.
- Increasingly, educators will de-emphasize imparting a static stock of information and ideas and will instead seek to enable all people to contribute to the advancement of knowledge.
- Demand for highly skilled educators will increase and preparing them will largely be a field-based engagement in situations where students interact with new knowledge resources.
- Schools and other educational institutions will increase in public importance, and the educating professions will increasingly become high-tech and high-prestige professions.
- Changes in information, games, and communication technologies will resuscitate the progressive movement in education, enabling it to be both broadly egalitarian and intellectually rigorous.

Communication, Computing, and Technology in Education aims to prepare students to deal with both present and future implications of new media and to play a constructive role in shaping the educational response to innovations in information and communication technologies including mobile devices and augmented reality and cloud computing. Although these concerns are common to all three programs, each has distinct nuances with respect to methods and purpose:

- Communication relies primarily on social science inquiry to understand, interpret, and shape how information and communication technologies influence culture and education, including areas such as literacy and teacher education.
- Computing in Education works with computer information systems to facilitate the effective extension of digital technologies into educational practice. This strand includes within it an online masters program that can be completed by students who live too far away to attend classes during the regular academic year.
- Instructional Technology and Media concentrates on the creation and application of inno-
vative technologies, guided by a research tradition grounded in pedagogy and cognitive science, in order to make new media work as powerful tools for study and teaching.

Across the three programs, students and faculty members engage in research, development, theory, and application. All three programs put a high priority on group work; fieldwork and internships; and planning, implementing, and completing innovative projects. Schools, computer companies, businesses, and other agencies are normally partners in projects, providing environments, materials, personnel, or opportunities for carrying them out. The Institute for Learning Technologies (www.ilt. columbia.edu), the Center for Technology and School Change (www.tc.columbia.edu/ctsc/), and the Columbia Center for New Media Teaching and Learning (www.cenmtl.columbia.edu) work closely with CCTE faculty members and students and provide a wide range of internship and fieldwork opportunities. The resources of the Games Research Lab are also available to students and faculty in CCTE (www.tc.edu/academic/mst/ccte/Games Researchlab). Short video segments of several CCTE faculty members and students talking about their courses and interests are found through the CCTE program website (www.tc.edu/mst/ccte).

## Communication

The program in Communication prepares students for various roles:

- Teaching and research positions in higher education;
- Working in schools using information and communication technologies to improve educational practice;
- Conducting formative and evaluative research in the areas of educational media and information technologies, in and out of school settings and across subject areas;
- Designing innovations in the use of new media for educational purposes; and
- Working in business and government settings to design and implement corporate communication programs.

The program uses methods of the social sciences, encompassing both qualitative and quantitative approaches to the study of communication and education. It asks in particular how education and other social systems change under the impact of new media. Faculty members and students pursue three broad areas of inquiry, enabling them to:

- Reflect on the historical effects of media and on the cultural uses of developments such as face-to-face speech, writing, printing, photography, film, radio, television, computers, and networked multimedia;
- Use anthropological and linguistic methods to study how the diverse forms of communication, literacy, information processing, and cognition condition educational practice;
- Explore the effects of media, including games, on social relations, and develop strategies for using information and communications technologies to improve conditions of education and life.

In the course of completing a degree, students should expect to attend closely to both technical artifacts and human activity: that is, both to material systems of communication in which technologies are the primary interest and to interpersonal, direct communication dynamics in which unmediated face-to-face exchanges are the subject of inquiry. A major theme for continuous reflection should be the diverse ways in which the modes of communication condition meanings that are actually and potentially communicated-whether in face-to-face conversation, through distance learning technologies, or through societies that are created in virtual worlds.

## Computing in Education

Students who complete the master's program in Computing in Education take positions in:

- Schools, as computer coordinators or teachers using advanced technologies in the classroom;
- New media companies, developing software and multimedia applications for education, training, and gaming environments; and - Academic computer centers, corporate information services, and in education departments at the federal, state, and local levels, managing the integration of information and communication technologies into schools.


## Instructional Technology and Media

 Students who have earned degrees in Instructional Technology and Media find positions in education, government, and industry. Some continue to work within formal education, as teachers, researchers, or administrators on the elementary, secondary, or college level. Others work in training and development departments in business or government agencies. An increasing number work as independent professionals in a variety of settings such as educational service, production consulting, and publishing. Still others have established themselves as researchers, designers, and producers for innovative multimedia projects.The World Wide Web and related technologies have lowered the costs of distance learning programs greatly while increasing their flexibility. Through Instructional Technology and Media, faculty members and students join
to develop the skills needed to make full use of the new opportunities in distance and distributed learning.

In recent years, students in the program have made four questions paramount:

- Which emerging technologies hold greatest promise for enriching learning experiences throughout the educational enterprise?
- What pedagogical strategies should designers embody in instructional materials, including those based on multimedia and those reflected in gaming environments?
- How should educators deploy, manage, and evaluate information and communication technologies in classrooms for optimal educational effect?
- What principles of design and practice should educators incorporate into distributed educational courses and programs?

Participants in the three CCTE program areas share a basic conviction that good design in educative matters starts with careful attention to the needs and characteristics of the individuals that the design will serve. For example, the ability to understand the individual through empirical research and empathic engagement will make the design of instructional technology not only technically proficient but educationally valuable as well. In all, this attention to the individual in society and culture defines the technological humanism we seek through all components of the programs in CCTE-a humanism that combines the use of sophisticated technology with humane commitments for guiding purposes.

## Special Degree Cohorts:

## The Intensive Master's Program <br> in Computing in Education

This track is designed primarily for those teachers who live too far from Manhattan to attend courses during the regular academic year and want an on-campus experience for coursework taken in the summer. Students in this program attend intensive four-week sessions at Teachers College, usually in July, and do the remainder of their credit work through independent study and/or online courses during the regular academic year. The degree can be obtained in two summers and the intervening academic year, but can also be done over a longer period of time.

Students in the Intensive Program concentrate in the area of Teaching and Learning with Technology or Technology Leadership. Courses in the program focus on using technology in schools, programming and hyper-
media development, theories of cognition and learning, and theories of school change and leadership. The Intensive Program accepts approximately 20 new students per summer; more than 300 students have completed the program.

For more information, write Dr. Howard Budin at hb50@columbia.edu, call (212) 678-3773, or visit http://www.tc.columbia.edu/mst/oice/.

## Online Master's Program in <br> Computing in Education

The program in Computing in Education includes a strand in which all coursework is conducted online. The online program is designed for teachers and others who work with schools and offers the same kinds of courses as the Intensive Master's program, but without the on-campus, face-to-face class experience. Participants take about ten courses online, which use video conferencing, discussion boards, and other means of online communication. Besides these courses, students have the opportunity to work on an independent project and to attend three-day workshops at Teachers College in the summers. Like the Intensive Program, students will concentrate in Teaching and Learning with Technology or Technology Leadership. All online courses are open to all CCTE students. For more information, write Dr. Howard Budin at hb50@columbia.edu, call (212) 678-3773, or visit http://www.tc.columbia.edu/mst/oice/.

## Technology Specialist

An M.A. program leading to a New York State teaching license for "Technology Specialist K12 " prepares candidates to become technology coordinators in schools. Student teaching and fieldwork are required. The program is available to those with or without initial teaching licenses who have some knowledge and experience in using technology in teaching. For further information, contact Dr. Ellen Meier at, (212) 678-3829; ebm15@columbia.edu.

Technology Specialist - Track II
This is a Master of Arts degree program leading to an initial teaching certificate as a Technology Specialist K-12. It is intended for those already holding New York State certification in another content area. Program goals include preparing individuals to use technology as a set of tools with students, to work effectively with teachers to help them learn to use technology and design, and implement curriculum in which technology is well integrated. Completing the program requires 38 Teachers College points, as well as, 100 hours of fieldwork and 40 days of student teaching.

## Special Application Requirements:

Masters (M.A. and Ed.M.) applicants are reviewed on an ongoing basis. For scholarship awards, applicants who meet the early deadlines receive preference (January 15 for summer and fall and November 1 for spring) with the most aid going to doctoral students who meet the Ed.D. January 2 early deadline. All applicants should consult the Admissions Office (www.tc.columbia.edu/admissions/) for additional application information.

Doctoral (Ed.D.) applicants are required to submit a writing sample, prior transcripts, letters of recommendation, a personal statement, and results from the GRE General Test (a TOEFL test score is required of international students). They are also strongly encouraged to arrange for an interview. In making financial aid decisions, CCTE reviews doctoral applications once a year in late February with the expectation that doctoral students will start during summer or fall sessions. Consequently, doctoral candidates are encouraged to meet the January 2nd early deadline. There is no guarantee of progression from a masters program to a doctoral program within CCTE. In addition to academic criteria, CCTE takes into account the relevance of its resources to a prospective student's professional goals as described in the personal statement when making admission decisions.

## Financial Aid and Other Assistance

In addition to college-wide financial aid opportunities and student services, the faculty members of CCTE are committed to generating an increasing range of opportunities for remunerative work that will integrate well into our program of studies. Essentially, such opportunities are of three types: assistantships in research and development projects; instructorships to teach basic courses in the field; and internships in industry, government, and education. The precise opportunities that exist in these areas continually change as projects here and elsewhere begin, proceed, and culminate. To find out more about these opportunities, students should consult individual faculty.

## Degree Requirements:

The college-wide degree requirements are stated in the Degree Requirements section of this bulletin. The following steps specific to Communication, Computing and Technology in Education amplify the college-wide requirements and should serve as an aid for structuring an individualized program of study based on previous experience, professional goals, and interests. Enrolled students can obtain further information about requirements and the academic calendar from the program office at
(212) 678-3344. Degrees represent advanced levels of mastery in rigorous scholarship and disciplined practice. In developing a program, students should find ways to meet the intrinsic demands of the field.

## Master of Arts <br> (32 POINTS REQUIRED)

To earn the Master of Arts (M.A.), students must satisfactorily complete 32 points of coursework ( 36 points for the Technology Specialist) and an integrative project. In CCTE programs, the M.A. degree serves two main functions: a mark of entry-level professional qualifications in the fields covered and a grounding for further, more advanced specialization in the field.

Master of Arts (M.A.) programs are offered in Communication, Computing in Education, and Instructional Technology and Media. In each of these M.A. programs, students must take coursework totaling at least 32 points. The following are required of all M.A. students:

## Core Seminar (1 point)

- MSTU 4000 Core seminar in communication, computing and technology

Foundational Knowledge. At least three areas must be represented ( 9 points, minimum) Cognitive Issues and Technology

- MSTU 4133 Cognition and computers Social Issues and Technology
- MSTU 4020 Social and communicative aspects of the Internet
- MSTU 4005 Equity, ethical, and social issues in educational technology
Cultural Issues and Technology
- MSTU 4028 Technology \& inquiry
- MSTU 5002 Culture, media \& education

Educational Practice and Design

- MSTU 4050 Online schools and online schooling K-12
- MSTU 4083 Instructional design of educational technology
- MSTU 4001 Technology and
school change


## Outside-the-Program Courses (6 points, minimum)

All students (at both master's and doctoral levels) must complete a minimum of three courses, each for at least 2 credits, at Teachers College outside of the Communication, Computing and Technology in Education Program (that is, courses with a prefix other than MSTU).

## Integrative M.A. Project

The Integrative M.A. Project can be either an individual project or part of a larger project involving several students. For students completing only the M.A. degree, this project should be related to their career goals and should provide tangible evidence of their skills and strengths.

Note: No more than 3 points of "skills" courses may be counted toward the M.A., although students are encouraged to take additional skills courses that further their interests and goals. "Skills" courses include the following (this is a sample list):

- MSTU 4029 Managing educational technology resources
- Topical courses (MSTU 5199 and MSTU 5814) offered on the following topics: Database-driven website development; director; 3-D modeling; flash communication server; Adobe InDesign; digital video; GIS in curriculum; creating dynamic websites.


## Additional Requirements for M.A. students in Communication (TECM) <br> - MSTU 4016 The history of communication

- At least nine points of additional MSTU courses
- Other courses chosen in consultation with an advisor

Additional Requirements for M.A. students in Computing in Education and Technology Specialist (TECP, TECD, TETS-INIT, TETTINIT)

- At least nine points of MSTU courses or other courses with the faculty advisor's approval (MSTU 5031, Object-oriented Theory and Programming II is recommended). In particular, M.A. students in the Intensive Masters Program, the Educational Technology Program, or completing the Computing in Education degree through the completely online option have a slightly more constrained set of courses available to meet program requirements and should work closely with their respective advisor.

Additional Requirements for M.A. students in Instructional Technology and Media (TEIT)

- MSTU 4083 Instructional design of educational technology (counts toward the Foundational Knowledge area)
- Two programming courses. This requirement can be met by taking the two-course ObjectOriented programming sequence, the twocourse Interactive Media programming sequence, or one course from each sequence.
- At least six points of additional MSTU courses
- Other courses chosen in consultation with an advisor

Candidates for the M.A. degree are expected to culminate their work with an integrative project. Such a project might be a review essay in which they give a thorough, well written summation of current research and development work in an area of their choice within the broad field of Information and Communications Technologies in Education or a multimedia instructional application. In addition, because experientially grounded learning is invaluable preparation for professional practice, students are strongly advised to take fieldwork or internships as an integral part of their master's program.

## Master of Education (60 POINTS REQUIRED)

An Ed.M. degree represents roughly the equivalent of two years of full-time study. It serves for some to mark progress toward a doctorate and for others to initiate intermediate professional qualifications for students who have previously completed a master's degree at Teachers College or another institution. Up to 30 points of graduate credit earned elsewhere may be counted toward the minimum 60 -point requirement. Ed.M. candidates who have completed an M.A. in CCTE, or an equivalent program, should select further courses to broaden and deepen their mastery of the field. Those who are transferring a significant number of points from a different specialty toward the Ed.M. should include a selection of CCTE core program courses in their remaining coursework. In addition to completing the minimum course requirements and developing a skill specialization, candidates for the Ed.M. degree culminate their work through a research or development project submitted to the faculty.

Master of Education (Ed.M.) programs are offered in Communication and Instructional Technology and Media. In each of these Ed.M. programs, students must take coursework totaling at least 60 points. The following are required of all Ed.M. students:

## Core Seminar (1 point)

- MSTU 4000 Core seminar in communication, computing and technology

Foundational Knowledge. At least three areas must be represented ( 9 points, minimum) Cognitive Issues and Technology

- MSTU 4133 Cognition and computers


## Social Issues and Technology

- MSTU 4020 Social and communicative aspects of the Internet
- MSTU 4005 Equity, ethical, and social issues in educational technology
Cultural Issues and Technology
- MSTU 4028 Technology \& inquiry
- MSTU 5002 Culture, media \& education Educational Practice and Design
- MSTU 4050 Online schools and online schooling K-12
- MSTU 4083 Instructional design of educational technology
- MSTU 4001 Technology and school change

All students (at both master's and doctoral levels) must complete a minimum of three courses, each for at least 2 credits, at Teachers College outside of the Communication, Computing and Technology in Education Program (that is, courses with a prefix other than MSTU). Suggested: HUDM 4120, Basic concepts in statistics, and/or ITSF 5000, Methods of inquiry: Ethnography and participant observation, and/or other basic research/inquiry course without an MSTU prefix.

## Integrative Ed.M. Project

The Integrative Ed.M. Project is a research or development project that should result from independent effort equivalent to that of a 3 -point course. Like the M.A. integrative project, it should provide tangible evidence of a student's skills and strengths and should represent the student's interests as well display the specialized skills developed for the degree.

Note: No more than 6 points of "skills" courses may be counted toward the Ed.M., although students are encouraged to take additional skills courses that further their interests and goals. "Skills" courses include the following (this is a sample list):

- MSTU 4029 Managing educational technology resources
- Topical courses (MSTU 5199 and MSTU 5814) offered on the following topics: Database-driven website development; director; 3-D modeling; flash communication server; Adobe InDesign; digital video; GIS in curriculum; creating dynamic websites.


## Additional Requirements for Ed.M. students in Communication (TECM) <br> - MSTU 4016 The history of communication <br> - MSTU 5606 Readings in communication theory and social thought I

- At least 15 points of additional MSTU courses
- Other courses chosen in consultation with an advisor

Additional Requirements for Ed.M. students in Instructional Technology and Media (TEIT)

- MSTU 4083 Instructional design of educational technology (counts toward the Foundational Knowledge area)
- Two programming courses. This requirement can be met by taking the two-course ObjectOriented programming sequence, the twocourse Interactive Media programming sequence, or one course from each sequence.
- At least 15 points of additional MSTU courses
- Other courses chosen in consultation with an advisor

Students accepted for a doctoral program should earn the Ed.M. as an integral part of their doctoral work. However, the Ed.M. can be far more than a stepping stone to a doctorate. It allows for great flexibility, and students can use it to lay a strong foundation for significant positions of leadership that demand high levels of skill but do not require doctoral-level academic certification. For instance, students can put together a very effective 60-point program dealing with "school media for curriculum innovation." In a similar way, one can develop a very strong grounding in educational software development through the Ed.M. degree. It can serve many purposes. One needs to think through one's aspirations and use the scope of the Ed.M. program to build academic and experiential foundations in accordance with one's achievement goals.

## Doctor of Education

Doctor of Education (Ed.D.) degree candidates should read Requirements for the Degree of Doctor of Education, which can be obtained from the Teachers College Office of Doctoral Studies. It states the formal requirements for the degree and lays out the steps leading to it. Communication, Computing and Technology in Education requirements provide experiences through basic courses, skill concentrations, and independent projects, all leading to the certification examination and the dissertation. These experiences have been designed to ensure that students develop skills in one or more modes of inquiry; contribute professionally to a field through conferences, presentations, or publications; and participate actively in CCTE functions outside of class work.

Programs are planned individually in consultation with a faculty advisor. Doctoral candidates should develop a systematic plan for study
early in their program, encouraging sustained consideration of a dissertation area and tailoring course selection to support dissertation work. The doctorate represents the highest level of educational preparation achievable in the field. To complete it well, students should meet all requirements in an intellectual spirit consonant with this status. Doctor of Education (Ed.D.) programs are offered in both Communication and Instructional Technology and Media. In each of these Ed.D. programs, students must take coursework totaling at least 90 points. The following are required of all Ed.D. students:

## Core Seminar and Doctoral Colloquium

 (3 points)One-point registration for MSTU 4000.
Ed.D. students must take MSTU 6600 for a total of two points after taking MSTU
4000. After two points of registration in

MSTU 6600, students must register for
MSTU 6600 for zero points each semester until graduation.
Foundational Knowledge
All four areas must be represented (12
points, minimum).
Cognitive Issues and Technology

- MSTU 4133 Cognition and computers Social Issues and Technology
- MSTU 4020 Social and communicative aspects of the Internet
- MSTU 4005 Equity, ethical, and social issues in educational technology
Cultural Issues and Technology
- MSTU 4028 Technology \& inquiry
- MSTU 5002 Culture, media \& education

Educational Practice and Design

- MSTU 4050 Online schools and online schooling K-12
- MSTU 4083 Instructional design of
- MSTU 4001 Technology and school change

Research Methods and Design (12 points, minimum)
Introductory Quantitative Methods Course (3 points)

- HUDM 4122 Probability and statistical inference

Note: HUDM 4120, Basic concepts in statistics does not meet this requirement.

Introductory Qualitative Methods Course, taken from the following or similar (3 points):

- C\&T 5502 Introduction to qualitative research in curriculum and teaching
- ITSF 5000 Methods of inquiry:

Ethnography and participant observation

- ITSF 5001 Ethnography and participant observation:
Fieldwork, analysis, reporting
Research/Research Design Applied to Technology (3 points)
- MSTU 5001 Assessing the impact of technology in schools
- MSTU 5025 Research technology in educational environment

Additional, non-introductory quantitative, qualitative, or other non-introductory research methodology class ( 3 points).
The following are examples of what is available. Students should familiarize themselves with the full range of courses that are offered and choose a class that is relevant to their dissertation work, in consultation with their faculty advisor.

| - A\&HE 6151 | Narrative research in <br> English education |
| :--- | :--- |
| - A\&HL 4104 | Discourse analysis |
| - HUDM 5122 | Applied regression analysis |
| - HUDM 5123 | Linear models and <br> experimental design |
| - ORL 6500 | Qualitative research <br> methods in organizations: |
|  | Design and data collection <br> Qualitative research <br> methods in organizations: <br>  <br> Data analysis and reporting |

Outside-the-Program Courses ( 6 points, minimum)
All students (at both master's and doctoral levels) must complete a minimum of three courses, each for at least 2 credits, at Teachers College outside of the Communication, Computing, and Technology in Education Program (that is, courses with a prefix other than MSTU).

Complete the doctoral certification process (see explanation later in this section).

Successfully propose, complete and defend the doctoral dissertation.

Register for the Dissertation Seminar (MSTU 7501 or 7503 , 1 point) when presenting the Dissertation Proposal. See also the regulations for MSTU 8900 and the section in the Academic Catalog on continuous registration.

Note: No more than 6 points of "skills" courses may be counted toward the Ed.D., although students are encouraged to take additional skills courses that further their interests and goals. "Skills" courses include the following (this is a sample list):

- MSTU 4029 Managing educational technology resources
- Topical courses (MSTU 5199 and MSTU 5814) offered on the following topics: Database-driven website development;
director; 3-D modeling; flash communication server; Adobe InDesign; digital video; GIS in curriculum; creating dynamic websites.


## Additional Requirements for Ed.D. students in Communication (TECM)

- MSTU 4016 The history of communication
- MSTU 4031 Object-oriented theory and programming I and
- MSTU 5606 Readings in communication theory and social
- At least 15 points of MSTU courses
- Other courses chosen in consultation with an advisor


## Additional Requirements for Ed.D. students

 in Instructional Technology and Media (TEIT)- MSTU 4083 Instructional design of educational technology (counts toward the Foundational Knowledge area)
- Two programming courses. This requirement can be met by taking the two-course ObjectOriented programming sequence, the twocourse Interactive Media programming sequence, or one course from each sequence.
- At least 15 points of MSTU courses
- Other courses chosen in consultation with an advisor


## Doctoral Certification Process

The Doctoral Certification Process for CCTE students has three steps. Students' names are not sent forward to the Office of Doctoral Studies to be certified until all three of the following requirements have been successfully completed.

1. An Integrative Question that the student answers in writing during the regular certification examination session that the Office of Doctoral Studies schedules each semester. This question is about some currently prominent educational technology topic that students answer by pulling material from CCTE courses and course-related as well as independent readings. The best way to prepare for this question is to think of currently important educational technology topics related to your area of interest and try to think of how you would integrate content covered in different courses to address these topics. Please Note: CCTE's certification examination is offered in the morning session of the exam day; there is no CCTE afternoon session.
2. A Literature Review or critical assessment of scholarship (a paper of around 30 pages, double-spaced) related to what is planned for the dissertation. This gives a head start on the literature review section of the dissertation. This paper is graded by the faculty advisor.

Approved papers may be posted and generally available to others for future reference.
3. A Certification Project that would be a smaller scale version of what might be done in the dissertation or a project or pilot study that leads to the dissertation project. This certification project has three steps:
a. Write a short proposal (five or fewer double spaced pages) of the planned project, which the faculty advisor must approve. The nature of the project would vary depending on the student's interests;
b. Complete the project;
c. Write a project report (around 30 pages), which is graded by the advisor.

When the faculty advisor verifies that the student has completed the Integrative Question portion, the Literature Review paper, and the Certification Project, the student is recommended for certification. The CCTE program has designed its certification requirements to help prepare students for work on their dissertations and to document that preparedness. To receive full certification for doctoral work, students must also meet certain college-wide requirements, as explained in the Degree Requirements section of this bulletin.

## Policies on the Written Examination Portion of the CCTE Certification Process

There are three hours available to write a response to one question. There is no choice of question. The question is constructed broadly so that it can be addressed by people from different perspectives and program strands within CCTE. CCTE students may bring resources into the examination (books, notes, etc.), but these cannot include electronic items on, for example, flash drives. While references to people and articles are expected in the body of the response, and work must not be mischaracterized, there is no need to present a formal reference list at the end of the response, or to be accurate on every date for each citation. Past questions are available on the certification examination section of the StudyPlace wiki (www.studyplace.org; search for "certification exam").

Students can attempt to successfully complete the written response portion of the certification process no more than two times.

## Evaluation Procedures

Each response is evaluated by the CCTE faculty, who meet as a group to read students' examinations. Students' names are removed from their examinations, and the examinations are then circulated during the meeting of the faculty. The examination is read and discussed and a decision is made about its grade.

## Basic Evaluation Criteria

All responses are evaluated with regard to the following four questions:

1) Does the response address the question asked?
2) Does the response integrate material (using several references and sources) from each of three different core courses or from various perspectives or theories?
3) Does the response present a coherent and meaningful discussion?
4) Is the response substantive enough to convince the reader that the student has an advanced, graduate-level grasp of the field?

## COURSES:

Most courses are offered once each year; others are offered each term and some are offered every two years. Current scheduling information may be obtained from the program office.

MSTU 4000. Core seminar in communication, computing and technology ( $0-1$ ) Dr. Chang. Required for incoming students. Meets with MSTU 6600. Discussion of critical issues, reading of key works, development of project in Communication, Computing and Technology in Education, presentation of work in progress, conversations with leaders in the field. Special fee: $\$ 35$.

## MSTU 4001. Technology and school change (2-3)

Professor Meier. Explores how technology is currently used in our schools and how technology can be used more effectively as a catalyst for larger school reform efforts. Participants will examine some of the institutional forces shaping the integration of technology into our schools and some of the institutional change theories that influence these forces to address the question: What can technology contribute to school improvement and how can we facilitate those changes?

MSTU 4005. Equity, ethical, and social issues in educational technology (2-3)
Dr. Budin. Addresses a wide range of issues concerning equity and access, including differential gender, racial, and ethnic uses of computers. Examines legal and ethical issues in students' use of technology with an emphasis on improving access and use of technology for all students. Special fee: $\$ 35$.

## MSTU 4008. Information technology

 and education (3)Faculty. Analytic overview of the uses of information technology in instruction. Examination of psychological and practical impact of information technology on our culture and its educational institutions. Special fee: $\$ 35$.

## MSTU 4010. Theories of communication (2-3)

Dr. Moretti. A broad, multidisciplinary survey of contemporary perspectives on communication. Topics include: definitions, models and theories of information processing, history of media
change, cross-cultural communication, interpersonal communication, and the uses and effects of mass media. Special fee: $\$ 35$.

MSTU 4012. Video as art: An Exploration (3) Professor Vasudevan. This course will take an aesthetic approach to the exploration of emerging forms of video, including anime, music videos, do-it-yourself video, video sharing websites and more. Special fee: $\$ 45$.

## MSTU 4016. The history of communication

 (2-3)Dr. Moretti. A comprehensive survey of the history of communication, tracing the development of the dominant modes of transmitting knowledge, from speaking to writing, from printing to the electronic media. Special fee: $\$ 35$.

## MSTU 4018. Design and communication

 in modern culture (3)Faculty. How have practices of abstract reasoning, the pursuit of formalism, and conceptualizing the structure of complex phenomena affected modern design and communication? Readings and class discussions explore this question, using examples drawn from architecture, fine art, graphics, typography, photography, advertising, industrial design, formal organization, process control, transportation, information theory and management, and major media of communication. Special fee: $\$ 35$.

MSTU 4020. Social and communicative aspects of the Internet (3)
Professor Kinzer. Examines: social communicative practices as synergistic; how space, time, and social networks evolve and Interact; and what this implies for the design and use of technology. Special fee: $\$ 45$.

## MSTU 4022. Telecommunications and

 distance learning (2-3)Faculty. Introduction to the use and educational implications of telecommunications, distance learning, and collaborative interchange using telecommunications, particularly the Internet and the World Wide Web. Special fee: $\$ 35$.

MSTU 4023. Cinema as cross-cultural communication (3)
Professor Vasudevan. Analyzes how films explore culture. Discussion of the film as well as the cultural messages portrayed. Special fee: $\$ 45$.

MSTU 4024. Television and the development of youth (3)
Professor Vasudevan. This course brings a sociocultural lens to issues related to youth (including children and adolescents) and the evolving terrain of television. Students will review research and theories and experiment with media production in this course. No prior media production experience is necessary. Special fee: $\$ 45$.

MSTU 4028. Technology and culture (3)
Professor Lin. Investigates research about what, why and how technology, inquiry and culture interact in education. Examines how technology
serves as a powerful catalyst for change in culture, individual learning inquiry and classroom culture. Special fee: $\$ 35$.

MSTU 4029. Managing educational technology resources (2-3)
Faculty. For educators involved in the planning, implementation, and maintenance at the building/campus level. Students learn how to apply educational technology to achieve educational objectives and to manage interpersonal relations in the process. Special fee: $\$ 45$.

## MSTU 4030. Computer applications

 in education (2-3)Faculty. Hands-on experience learning a variety of computer applications, focusing primarily on word processors, spreadsheets, and database managing. Students create their own educational applications. No computer background assumed. Special fee: $\$ 45$.

MSTU 4031. Object-oriented theory and programming I (3)
Faculty. Communicating with computers and humans through programs. Uses a graphic language to formalize the concepts behind software structure and a current, widely used implementation language such as Java to construct representative applications. Special fee: $\$ 45$.

## MSTU 4035. The computer as an

 instructional aid (3)Faculty. A presentation of research and issues surrounding the use of computing in schooling. Cognitive and social effects of computers on students are investigated and strategies are developed for integrating computing into the curriculum. Special fee: $\$ 35$.

MSTU 4036. Hypermedia and education (3) Faculty. Introduction to hypermedia products and programming and their role in education. Four-point registration is for hypermedia programming lab. Special fee: $\$ 45$.

MSTU 4037. Computers and the uses of information in education (2-3)
Dr. Budin. This course examines how computers can structure and present information, evaluates current educational software that uses information, and considers the design of software for integrating information applications into education. Prerequisite: MSTU 4030 or equivalent computer experience. Special fee: $\$ 45$.

MSTU 4039. Video games in education (3) Professor Lee and Faculty. Provides students with tools they will need to understand, analyze and build games. Focus is on gaining an understanding of rules, interactivity, play, social interaction, and all other factors that go into making an innovative and fun game. Primary focus is on the basic language of games: game play and game design. Course also addresses games from an educational perspective. Special fee: $\$ 45$.

MSTU 4040. Introduction to mobile phone learning (3)
Faculty. Explores the use of the mobile phone and related devices for learning. Course participants will learn about different mobile phone technologies, pedagogical and theoretical frameworks for mobile learning, how to design activities for mobile phones and related devices.

MSTU 4049. Technologies and literacies (2-3) Professor Kleifgen. An examination of the relationship between computers and the writing process. The course explores the effect of electronic text on traditional notions of text, literacy, and communication. Assumes no computing experience. Lab fee: $\$ 35$.

MSTU 4050. Online schools and online schooling K-12 (2-3)
Dr. Lowes. This course examines the different models of the K-12 virtual school and virtual schooling experience in the United States and internationally. Special fee: $\$ 35$.

MSTU 4052. Computers, problem solving and cooperative learning (2-3)
Dr. Budin. Considers how computers may be used to promote cooperative learning in problem solving for students throughout the curriculum, focusing on the use of simulations, databases, programming, and problem solving software. Course content will include active participation in cooperative learning using computers as well as background work in educational theory as it relates to problem solving and cooperative learning. Special fee: $\$ 35$.

MSTU 4080. Television and video applications in education (3)
Faculty. The role of media literacy is explored as a means to understand our popular culture and foster critical autonomy in young people. Emphasis is placed on critiquing educational television programs and video and using them effectively in the classroom. Special fee: $\$ 35$.

MSTU 4083. Instructional design of educational technology (2-3)
Professor Lin or Professor Okita. The nature of instructional technology, systems approaches to planning, managing, and evaluating instructional processes and materials. Emphasis is on instructional design. Special fee: $\$ 45$.

## MSTU 4085. New technologies for learning

 (2-3)Faculty. A survey of technologies such as multimedia and telecommunications applied to learning and research, with full demonstrations and critical discussion by experts. Includes discussion of implications for educational change. Special fee: $\$ 35$.

## MSTU 4086. Text understanding and

 design (3)Professor Black. Explores ideas about how people understand textual materials and learn from them; then applies these ideas to the design of
instructional text. Students design instructional materials for topics of interest to them. Special fee: $\$ 35$.

MSTU 4133. Cognition and computers (2-3) Professor Black. This course explores ideas about cognition and knowledge representation and how they relate to the use of computers in instruction. Students select a subject area, learn to represent knowledge from it so that it can be implemented in a computer instructional system, and use the knowledge representation to characterize the cognitive prerequisites and consequences of learning to use computers. Special fee: $\$ 45$.

## MSTU 4134. Cognition and computers lab

 (1-3)Permission required. Corequisite: MSTU 4133. Special Fee: $\$ 35$.

## MSTU 4700. Student teaching practicum in educational technology (3)

Professor Meier. Addresses issues related to student teaching as a technology specialist, using various texts and debriefing on experiences in the classroom and how to apply your skills to challenges posed by various schooling situations.

## MSTU 4901-MSTU 4902. Research

 and independent study (1-6)Faculty. Permission required. For master's students only. Students propose a program of independent research or project development to a faculty member. Students in their first term of study are generally not accepted. Conference hours are arranged.

MSTU 5000. Possibilities of virtual worlds (3) Professor Kinzer. Explores possibilities of virtual worlds for gaming and education. Through readings and theoretical discussions of identity construction, positioning and social aspects of virtual and traditional communities, participants explore how virtual environments may support teaching and learning and how virtual communities are affecting people's lives. Special fee: $\$ 45$.

## MSTU 5001. Assessing the impact of

 technology in our schools (3)Professor Meier. Examines the evidence of effectiveness of technology in our schools. Through an examination of key concerns in the technology research literature, we will address essential questions for understanding the impact of technology.

MSTU 5002. Culture, media and education (3) Professor Vasudevan. In this course, we consider the cultural implications of media and technologies for education by pairing theoretical frameworks with case studies and other examples of empirical research. Media production is required.

## MSTU 5003. Theory and programming of

 interactive media I (3)Professor Lee and Faculty. Aimed at students who are interested in building instructional multimedia in Adobe Flash. Provides students with tools for understanding, analyzing and constructing Flash-based multimedia in a hands-on manner. Examples and mini-tutorials abound. Theory and
design are integrated to ensure students emerge as authors of well-designed, educationally sound media.

MSTU 5004. Digital geographies and virtual spaces (3)
Professor Vasudevan. Explore newly-developed spaces and consider how the evolving relationship between new technologies and new modes of communication and literacy are making these spaces available.

MSTU 5005. Case-based teaching in electronic environments (3)
Professor Kinzer. Focuses on theory related to designing, developing, and using multimedia case methodology in education. Students are encouraged to examine educational case methodology within their interest area. Special fee: $\$ 45$.

MSTU 5006. Database driven website development (2-3)
Faculty. Explores and provides a working knowledge of the technical and theoretical underpinnings of web application development by examining the layers of database construction, web programming, and user interface design.

MSTU 5010. Boundaries and theories of learning with technological artifacts (3) Professor Okita. Explores learning partnerships that take place between people and technological artifacts (e.g. robots, agent-avatars) emphasizing learning effects on the human partner. With regard to such artifacts: examines social components, introduces current research findings on learning in social interactions, and links those to cognitive factors that influence learning, knowledge construction, design and assessment. Students work on group-based projects throughout the semester. Special Fee: $\$ 45$.

MSTU 5013. Theory and programming of interactive media: Part II (3)
Faculty. The second-level course in the sequence beginning with MSTU 5003 provides participants with advanced theoretical and technical knowledge to design and develop interactive media that is firmly grounded in learning theory and design principles. Expands and delves more deeply into concepts introduced in MSTU 5003. Special Fee: \$45.

## MSTU 5015. Research/programming in

 serious games (3)Professor Lee. In-depth exploration of research topics related to serious games in education, tailored for students currently involved in gamebased research or interested in pursuing a research project in this area. Experience with game design and programming skills are highly recommended. Special fee: $\$ 35$.

## MSTU 5020. Computer-mediated

 communication (3)Faculty. Analyzes characteristics of such comput-er-mediated communication systems as networked multimedia, electronic mail, bulletin boards, and computer conferencing and situates these systems in the context of the emerging national informa-
tion infrastructure. Students will participate in online communication systems. Special fee: $\$ 35$.

MSTU 5025. Researching technology in educational environments (3)
Faculty. This course is designed as an overview of research designs and methodologies for students who are interested in researching the uses of technology in education, including both face-to-face and online/distance learning environments. The course looks at the theoretical bases for, and practical implementation of, different quantitative and qualitative research approaches, methodologies, and instruments. It is structured around a series of hands-on case studies in which students design research studies, revise existing instruments, and analyze previously collected data for technology-related projects in classrooms and online. Students are encouraged, but not required, to come with a research project in mind. Special fee: $\$ 40$.

MSTU 5029. Technology leadership and the schools (3)
Professor Meier. Identifies appropriate theoretical frameworks and recent findings from educational technology research to inform relevant policy and practice concerns, including equity considerations. Special fee: $\$ 35$.

## MSTU 5030. Intelligent computer-assisted instruction (2-3)

Professor Black and Faculty. Prerequisite: MSTU 4133. Participants study ideas about the representation of knowledge, models of the learner, and teaching strategies that have been developed in artificial intelligence and cognitive psychology, as well as develop and test intelligent computer-assisted instruction materials for topics of interest. Special fee: $\$ 35$.

MSTU 5031. Object-oriented theory and programming II (3)
Faculty. Prerequisite: MSTU 4031 or a solid basic knowledge of programming. Applies programming to significant problems using Java or C ++ to construct salient applications. Special fee: $\$ 45$.

## MSTU 5035. Technology and metacognition

 (3)Professor Lin. This course explores how theories of learning, development and cognition can shape the design of instruction. Readings cover a range of instructional theories and highlight the underlying influences of those theories. Although the course includes a brief survey of historical trends in the field, the primary course focus is on current and emerging theories of instruction, such as distributed and dynamical views of cognition and learning. Students are encouraged to present and discuss their research interests and projects as they relate to the focus of the course. Special fee: $\$ 45$.

MSTU 5191-MSTU 5192. Educational video production I and II (2-3)
Faculty. Permission required for MSTU 5192. Practical studio and field production experience of educational video programs, with special
concern for realizing educational purposes through directing, scripting, staging, camera operation, lighting, and sound design. Special fee: $\$ 50$.

## MSTU 5194. Models of human-computer

 interaction (2-3)Faculty. This course explores the psychological and educational literature on human-computer interaction and learning. What is the role of human-computer interaction in learning and teaching with new educational technologies? What are the key formats and attributes of human-computer interaction with electronic media? These and other questions are studied by discussing current theory and research and by evaluating state-of-the-art media projects. Special fee: $\$ 35$.

MSTU 5202. Fieldwork (1-6)
Faculty. Permission required. Opportunity for qualified students, individually or in small groups, to develop and pursue projects in schools, community agencies, business organizations, and communication facilities. Students in their first term of study are generally not accepted. Conference hours are arranged.

MSTU 5515. New media teaching and learning (3)
Dr. Moretti. Permission required. This course provides students with experience in the development of new media projects and a forum for discussing the implications for new media on education, particularly in higher education. The course involves a fieldwork component. Special fee: $\$ 35$.

MSTU 5555. Technology and the emergence of a global curriculum (2-3) Professor Okita. This course deals with the impact of technology on human society over the ages, how technology in particular is shaped by, and in turn shapes, the vision informing a specific culture and its curriculum, and how the global sharing of technology is inexorably contributing to the emergence of a common global curriculum. Uses its own website, www.tc.columbia.edu/~global. Special fee: $\$ 35$.

MSTU 5606. Readings in communication theory and social thought (3)
Dr. Moretti. Each week during the academic year, participants in this course will read and discuss important work in the literature of communication. These works all consider how the conditions and constraints of human interaction affect culture, public discourse, and the historical quality of life. The aim is to acquire a thorough grounding in how thinkers have addressed a basic problem in the study of communication over the past century and a half. Completion of written work for the colloquium is part of the certification requirement for doctoral candidates in the Communication program, and it can serve as the culminating project required for completion of the Master of Education degree in that program.

MSTU 5814. Work conference (1-2)
Faculty. Permission required. Occasional brief conferences convened by Communication, Computing and Technology on subjects of special interest. Special fee: $\$ 35$.

MSTU 6000. Advanced designing educational games (3)
Professor Lee and Faculty. Permission required. Periodically under this course number, various faculty and staff members offer courses on important topics in communication, computing, or instructional technology and media which will be announced at least one semester in advance. Topics may vary each semester and may include any of the following: art, music, and technology; their symbiotic interplay; assessing the impact of technology in our schools; database driven website development; educational technology research; gender, communication, and digital technology; media and education; research methodologies; social and emotional learning and digital technology; technology and school change; technology, education, and public policy; technology, inquiry, and culture; writing technology. Special fee \$30-50.

## MSTU 6031. Multimedia educational

 projects (3-6)Faculty. Permission required. Team approach to developing computer-based educational software using hypermedia, authoring languages, and programming languages. Some background in instructional design recommended. Special fee: $\$ 50$.

MSTU 6201-MSTU 6204. Advanced fieldwork (1-6)
Faculty. Permission required. Extended opportunities for students who have completed MSTU 5200.

MSTU 6401-MSTU 6404. Internship (1-6) Faculty. Permission required. Prerequisite: basic courses in the student's specialization, evidence of competence in the internship area, and prior arrangement with cooperating institution. Internship in schools, colleges, Teachers College facilities such as the Micro-computer Resource Center, community agencies, business organizations, and communication facilities. Students in their first term of study are generally not accepted.

MSTU 6532. Seminar in cognitive science (1-3)
Professors Black and Lin. Permission required. In-depth discussion and critique of research proposed and conducted by others and by students in the class. Topics vary from term to term. Course is for advanced students who are designing and conducting their own research projects; they may take the course as many times as they like. Special fee: $\$ 45$.

MSTU 6600. Colloquium in communication, computing and technology in education (0-1) Faculty. Continuous participation required of certified doctoral students. Discussion of critical issues, reading of key works, formal proposal
of dissertation topics, presentation of work in progress, conversations with leaders in the field. Special fee: $\$ 35$.

MSTU 6901-MSTU 6904. Research and independent study in communication, computing and technology in education (1-6)
Faculty. Permission required. For doctoral students only. The participating student will propose a program of independent research or project development to a faculty member. Students in their first term of study are generally not accepted.

MSTU 7501 and MSTU 7503. Dissertation seminar (1)
Faculty. Permission required. Presentation of dissertation proposal for approval by a sponsoring committee. Student arranges one two-hour meeting with his or her sponsoring committee.

MSTU 8900. Dissertation advisement (0) Faculty. Advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. See section in this bulletin on Continuous Registration for Ed.D. degree.

## MATHEMATICS EDUCATION

## Program Coordinator: <br> Professor Bruce R. Vogeli <br> Program Office: (212) 678-3381 <br> Fax: (212) 678-8319 <br> Email: tcmath@tc.edu <br> Website: www.tc.edu/mst/mathed

Initial Master of Arts degree students should direct admissions and certification questions to Professor Alexander Karp (212) 678-3842, apk16@columbia.edu.

## Degrees Offered:

MATHEMATICS EDUCATION (MATH)
Master of Arts (M.A.)
Master of Science (M.S.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Education in the College
Teaching of an Academic Subject (Ed.D.C.T.)
Doctor of Philosophy (Ph.D.)
MATHEMATICS EDUCATION.
initial certification (MATH-INIT)
Master of Arts (M.A.)
*MATHEMATICS EDUCATION.
PROFESSIONAL CERTIFICATION (MATH-PROF)
Master of Arts (M.A.)
MATHEMATICS EDUCATION-
transitional b (MATH-TRAN)
Master of Arts (M.A.)

* Program not currently accepting applications


## Program Description:

Over its long and distinguished history, the Program in Mathematics Education has stressed the preparation of leaders in education. These leaders are successful scholars in their discipline, as well as educators. Faculty and staff are committed to leadership training through a variety of courses, workshops, and research experiences, domestic and through international study offerings. Many of the local learning experiences are performed in collaboration with private, public, and parochial schools in the tristate metropolitan region.

Master's level offerings in mathematics education are appropriate for both initial and professional teachers. Advanced master's and doctoral programs complete preparation for a variety of positions including: teaching, supervisory, and research roles spanning the elementary through college levels of instruction. Some courses offered through these programs are intended especially for students from other areas of study at Teachers College who need to acquire knowledge and skills in mathematics but who do not wish to earn a degree in this area.

However, a hallmark of Teachers College mathematics education program is a strong emphasis on mathematics content and the role of mathematical ways of thinking in the teaching and learning of mathematics. Our graduates take positions in college teaching of mathematics in addition to pre-college professional roles.

## Master of Arts

Emphasis is placed on those competencies necessary for effective mathematics teaching as a means of enhancing professional growth of initial and professional teachers. Conceptual issues in teaching are translated into practice through group and individualized instruction in special methods courses. Master of Arts requirements include a culminating scholarly project.

A minimum of 32 points of coursework is required, along with a final essay or project. No transfer credit for graduate courses completed elsewhere can be applied to the M.A. degree. Courses taken through these programs and elsewhere at Teachers College in mathematics, mathematics education, and professional education to meet individual needs may be supplemented with permission by courses taken in other faculties of Columbia University.

## Master of Science and <br> Master of Education

Both programs require a minimum of 60 points, a formal essay or integrative project, and involve extensive preparation in mathematics as well as education. For the Master of

Science degree, the college requires that a minimum of 32 points with an integrative project (or 30 points with a formal essay) be completed under the auspices of Teachers College, including 18 points that must be earned in Teachers College courses. Master of Science students who choose to do an integrative project may use a maximum of 28 semester hours of graduate credit from other recognized institutions to reduce the degree requirement. Master of Science students who choose to do a formal essay, as well as Master of Education students, may apply a maximum of 30 semester hours of graduate credit toward their degree requirement. Please refer to the Degree Requirements section of this bulletin for college-wide minimum point requirements. For the M.S. degree, there is greater emphasis on preparation in mathematics content. In the Ed.M. program, there is greater emphasis on preparation in professional education. Programs are arranged in consultation with the major professor to meet both program and college requirements. Applicants for the M.S. and Ed.M. degrees must also prepare a written integrative project.

## Doctoral Degrees

The department provides programs for both the Ed.D. and the Ph.D. degrees. In general, the Ed.D. degree places emphasis on breadth of professional coursework with a focus on educational practice. All candidates are required to be competent in statistical research methodology and computer programming and to have knowledge of the epistemology of mathematics and of psychology sufficient to be an informed scholar-practitioner. All doctoral candidates must have a written program plan approved by their advisor. The approved plan then must be approved by the Office of Doctoral Studies. Following submission of a statement of total program, the student normally completes doctoral coursework and engages in doctoral research and writing. Refer to the Ph.D. and Ed.D. Requirements Bulletin, prepared by the Office of Doctoral Studies, for a fuller description of degree requirements.

In planning a program of study, it should be noted that doctoral students are required to complete a minimum of 20 points after taking the certification examination for the first time, including points taken during the term in which that examination is taken.

## Specializations:

## Elementary School Mathematics

The Elementary School Mathematics Specialist program is designed for those who are preparing for positions of leadership in elementary schools or in the training of elementary school teachers. Programs for elementary school specialists emphasize knowledge of subject matter,
methodologies, and curricula of mathematics and include appropriate field experiences with elementary school students and teachers. In addition to program offerings, students have access to courses in related departments and institutions.

## Secondary School Mathematics

The Secondary School Teaching program includes an in-service component for experienced teachers and preservice education for students entering the profession. Programs are designed individually in consultation with a faculty advisor to reflect each teacher's background and goals. The program stresses the direct application of theory to practice with particular emphasis on experiences with teaching strategies that match classroom activities to student characteristics, that examine teacher and student interpersonal interaction, and that reflect the historical and philosophical roots of the discipline. Final project for the degree should include evidence that these components have been fulfilled.

## Supervision in Schools

Students interested in mathematics supervision in schools may elect to develop individual programs that reflect their specific background and interests and that draw on the resources of the department and college, or they may work as part of the staff of the field-based teacher education programs. School and university faculty work with graduate students in a collaborative effort where teaching, preservice, and supervision training and education research are intimately related.

## Teacher Education in Mathematics

The Teacher Education in Mathematics program is designed to prepare scholars for educational leadership roles as education professors in colleges and universities. Participants in the program have opportunities to build their mathematics content background through content courses in the department and the offerings of Columbia University. There are opportunities also for professional experiences in the initial and professional teacher education programs.

## College Teaching of an Academic Subject

 Teachers College offers a doctorate in college teaching that emphasizes preparation in content supplemented by a program of professional education. Field experiences can be pursued in mathematics, computing, and several related disciplines. The course content and sequence are especially organized to meet the unique needs and career goals of each candidate within the general requirements of the Ed.D. degree at Teachers College.
## Special Application <br> Requirements/Information:

Applications are reviewed on an ongoing basis. Preference in scholarship awards will be given to applicants who meet the early deadline.

Mathematics education students seeking Master of Arts, Master of Science, and Master of Education degrees are expected to have completed at least 24 credits of undergraduate mathematics.

Applicants who wish to receive Initial New York State teaching certification should apply to the Master of Arts degree program.

Mathematics education students seeking Doctor of Education or Doctor of Education in the College Teaching of an Academic Subject degrees are expected to have completed an undergraduate major in mathematics. Mathematics education students seeking a Doctor of Philosophy degree should have both undergraduate and master's degrees in their specialization.

## Degree Requirements:

## Mathematics Education

Programming competencies in at least one computer language and further computer science training equivalent to at least 6 points of graduate study ordinarily are required of all students seeking degrees beyond the Master of Arts. These points either can be included in the mathematics/mathematics education requirement or can be taken as electives.

In addition to content courses in mathematics, students should enroll in at least two professional courses in mathematics education including MSTM 4019, MSTM 4020, MSTM 5012, or MSTM 5520. All students are encouraged to take MSTM 5800-5801 for 1 to 3 points in at least two semesters.

## Master of Arts

Normally students complete 24 points in courses in mathematics and mathematics education including MSTM 4019 and selected courses in related disciplines such as statistics and computing. The remaining 8 points ( 3 courses) are reserved for electives chosen from professional areas such as psychology, philosophy, curriculum, etc. It is recommended that students enroll in MSTM 5800-5801 for 1 to 3 points. Programs for specialists in the teaching of elementary school mathematics should include MSTM 5010. Secondary school specialists should enroll in MSTM 5023, MSTM 5032, and MSTM 5037.

Prospective community college teachers should select courses in at least three mathematical areas such as analysis, algebra, and computing, in preparation for study beyond the master's level. Preparation in computing is recommended for all specializations. Initial certification students should refer to the program brochure for information on additional requirements for state certification. All applicants for the M.A. degree must prepare a written project as a culminating integrative experience.

## Master of Science

Normally the program of studies for the Master of Science (M.S.) degree should include 42 points in courses in mathematics and mathematics education. Preparation in mathematics content should be of sufficient depth in two or three areas to communicate content effectively at the freshman and sophomore college levels. Algebra and analysis are recommended as areas of concentration. Content courses can be selected from courses offered by the department or from courses offered by the Graduate School of Arts and Sciences of Columbia University. Preparation in computing and statistics is also recommended.

## Master of Education

Typically, the program of studies for the Master of Education (Ed.M.) degree should include 42 points in courses in mathematics and mathematics education. Preparation in mathematics content should be of sufficient depth to provide leadership to elementary and secondary school teachers. Content courses can be selected from courses offered by the department or from courses offered by the Graduate School of Arts and Sciences of Columbia University. Students interested in developing research competencies for further graduate study should elect at least 6 points in statistics. HUDM 4122, Probability and statistical inference, and HUDM 5123, Linear models and experimental design, are recommended.

## Doctoral Degrees

All candidates for the Ed.D., Ed.D.C.T., or Ph.D. degrees are expected to demonstrate both mathematics and mathematics education competencies through a series of certification examinations taken upon the completion of 60 graduate points. Certification examinations test the student's knowledge of current research and theory in mathematics education and mathematics content. Examinations are offered once in the fall, spring, and summer terms. Courses recommended as preparation for the examinations include MSTM 4019/4020, MSTM 6037, and 6000-level mathematics content courses.

Students must demonstrate acceptable proficiency in at least three of the following six mathematics content areas: algebra, analysis, computer mathematics, foundations of mathematics, geometry and topology, and probability and statistics. Students may sit for the examination in mathematics content during the regular certification examination times. Alternatively, they may register for advanced content courses and, with permission of the program, sit for the content area certification examination upon completion of the course. Incoming doctoral candidates should register for Professional Seminar in Mathematics during the first year of doctoral studies.

Doctoral students whose dissertations require statistical analysis should include appropriate statistics courses in their programs. These points can be included either in the mathematics/mathematics education requirement or can be taken as research electives.

## Doctor of Education

A program of study for the Doctor of Education (Ed.D.) degree must include a minimum of 90 semester hours of approved graduate credit, at least 45 points of which must be taken under Teachers College registration. In order to permit the acquisition of broad basic scholarship, each program of study should include at least 70 points in mathematics and mathematics education. At least 24 points should be at an advanced level. Ordinarily, points in mathematics and mathematics education should include at least 45 points in mathematics content courses, 12 points in mathematics education courses, and 12 points of research preparation including MSTM 6500 and MSTM 7500.

Professional courses taken outside the program of Mathematics Education normally should include 15 points in the curricular, psychological, and social foundations of education. Students specializing in teacher education are encouraged to select elective courses related to higher education programs and practices.

Preparation in computing and statistics is also recommended. Programming competencies in at least one computer language and further computer science training equivalent to at least 6 points of graduate study are desirable. Students whose dissertations involve statistical analysis are required to include appropriate statistics courses in their programs. These points can be included either in the mathematics/ mathematics education requirement or can be taken as electives.

The Ed.D. culminates in a dissertation contributing knowledge to the field and should be planned early in the doctoral program when sufficient advanced courses have been completed to permit the candidate to enroll in relevant research courses and pertinent advanced study to enable efficient preparation of the dissertation. Dissertations in mathematics education can be (1) experimental studies in learning, (2) design and formative evaluation of mathematics curricula, or (3) analytical studies in policy theory in mathematics education.

## Doctor of Education in the College

 Teaching of an Academic Subject The Program in Mathematics Education at Teachers College offers a program of study leading to the Doctor of Education Degree in the College Teaching of Mathematics (Ed.D.C.T.) to prepare students for positions as teachers of mathematics in two- and four-year colleges.This degree program is designed to develop both the depth and breadth in the students' knowledge of mathematics but is intended to prepare graduates for careers in teaching rather than in mathematics research. For further details concerning general degree requirements, students should consult the bulletin, "Requirements for the Degree of Doctor of Education in the College Teaching of an Academic Subject" available in the Office of Doctoral Studies.

A program of study for the Ed.D.C.T. degree must include a minimum of 90 semester hours of approved graduate credit, at least 45 points of which must be taken under Teachers College registration. In order to permit the acquisition of broad and basic scholarship, each program of study should include at least 75 points in mathematics and mathematics education, with at least 30 points in advanced courses and 15 points in professional educational disciplines and including at least two courses related to higher education programs and practices.

Ordinarily, points in mathematics and mathematics education should include at least 50 points in mathematics content courses, three points in either MSTM 5012 or MSTM 5520 , and 12 points of research preparation including MSTM 6500 and MSTM 7500. (See course listing for descriptions). Preparation in mathematics content should be of sufficient depth in three areas to communicate content effectively at the freshman and sophomore college levels. Algebra and analysis are recommended as initial areas of concentration. Content courses can be selected from courses with the department or from courses offered by the Graduate Faculties of Columbia University.

Candidates for the Ed.D. in College Teaching who have not completed the equivalent of at least one year of full-time service as a college teacher of mathematics/computing/statistics are required to include MSTM 6400 within their doctoral programs. Interns will teach college mathematics courses under the supervision of experienced college teachers for a period of at least one semester. Incoming doctoral candidates should register for Professional Seminar in Mathematics during the first year of doctoral studies.

Candidates for the Ed.D.C.T. are required to demonstrate competency in one language chosen from among French, German, and Russian. Students who require other languages for the preparation of their dissertation may petition the department to request substitution. Students in mathematics may not use computer languages to satisfy the language requirement. The Ed.D.C.T. degree requirements include a dissertation contributing knowledge to the field and should be planned early in the doctoral program when sufficient advanced courses have been completed to permit the candidate to enroll in relevant research courses and pertinent advanced study to enable efficient preparation of the dissertation. Doctoral dissertations in the college teaching of mathematics can be (1) experimental studies in adult learning, (2) design and formative evaluation of college mathematics curricula, or (3) analytical studies in policy theory in mathematics post-secondary education.

## Doctor of Philosophy

The Doctor of Philosophy (Ph.D.) degree emphasizes research competencies. The degree requires a scholarly dissertation of intellectual merit and sound research methodology. Dissertation research may include analytical studies of the process of teaching or experimental studies of the teaching-learning process, including studies of verbal learning and laboratory practice, or historical studies.

Candidates are encouraged to develop an association with a faculty member early in their studies to identify a problem area of mutual interest to plan a course of studies that leads to the competencies needed to complete dissertation research and prepare for a professional role. Further details are available in the brochures on doctoral studies and in the general descriptions of doctoral programs available from the Office of Doctoral Studies.

A program of study for the Doctor of Philosophy degree must include at least 45 points taken under Teachers College registration. In order to permit the acquisition of broad and basic scholarship, each program of study should include at least: 60 points in mathematics, mathematics education, statistics and
computing. At least 35 points should be in advanced courses- including research courses (MSTM 6500 or 6501 and MSTM 7500). (Any Teachers College course at the 6000 level or above, any Columbia University Graduate School of Arts and Sciences course with a " $G$ " prefix, any "W" course numbered above 4000, or any transferred course with a graduate-level prerequisite will be considered an advanced course.) Further, 15 points in the philosophical, psychological, and curricular foundations of education must be included in every Ph.D. program.

Candidates for the Ph.D. degree are required to demonstrate competency in two languages chosen from among French, German, and Russian. Students who require other languages for the preparation of their dissertation may petition the program to request substitution. Students in mathematics may not use computer languages or statistics to satisfy the language requirement.

The Ph.D. dissertation is a scholarly study contributing new knowledge to the field and should be planned early in the program when sufficient advanced courses have been completed to permit the candidate to enroll in relevant research courses. Ph.D. dissertations in mathematics education should be (1) experimental studies in learning, (2) analytical studies in policy theory in mathematics education, or (3) other scholarly investigations of problems and issues of broad significance in the field.

COURSES: (* = course open to non-majors)

## Mathematics Education

For certain courses in the program in Mathematics Education, special fees, including laboratory fees, may be assessed.

## Theory and Methods

## *MSTM 4019. Mathematics teaching

 and learning I (3)Dr. Garrity. Cognitive development and learning strategies for teaching and the use of instructional materials. Current research in mathematics education. Required for preservice students.

## MSTM 4020. Mathematics teaching

 and learning II (3)Professor Vogeli. Historical/comparative study of mathematical education programs in the United States and abroad. Current research in mathematics education.

## *MSTM 4026. Teaching applied

 mathematics (2-3)Faculty. The role of applications in mathematics curriculum. Mathematical models, use of calculators and computers. Applications in the natural and social sciences.
*MSTM 5010. Mathematics in the elementary school (3)
Professor Walker, Dr. Garrity. Problems, issues, and methods in the teaching and supervision of elementary school mathematics.

MSTM 5011. Mathematics in the secondary school (3)
Faculty. Problems, issues, and methods in the teaching and supervision of secondary school mathematics. Includes field experiences. Required for preservice students.

MSTM 5012. Mathematics in twoand four-year colleges (3)
Professor Vogeli, Professor Smith. Problems, issues, and methods in the college teaching of mathematics.
*MSTM 5020. Mathematics and multicultural education (2-3)
Professor Walker. Survey of mathematical topics and methods appropriate for multicultural and bilingual programs.

MSTM 5022. Mathematics curriculum development (2-3)
Professor Vogeli. Principles, strategies, and techniques for curriculum development and textbook preparation in mathematics.

MSTM 5023. Problem solving (2-3)
Professor Karp, Dr. Smith. Theories and methods of mathematical problem solving with applications to classroom instruction.
*MSTM 5025. Teaching computer
mathematics (2-3)
Faculty. A review of teaching methods and curricular innovations in computing and computer mathematics.

MSTM 5039. Comparative mathematics education (3)
Professor Vogeli. A review and comparison of mathematics education in other nations.

MSTM 5520. Seminar in the college teaching of mathematics (3)
Dr. Smith. Current issues in under-graduate mathematics. Examination of relations between elementary and advanced mathematics.

MSTM 6025. Advanced topics in teaching computer mathematics (3)
Faculty. Open only to doctoral students. An advanced review of teaching methods and curricular innovations in computing and computer mathematics.

MSTM 6039. Advanced comparative mathematics education (3)
Professor Vogeli. A review and comparison of mathematics education in other nations.

## Content Courses

Courses in mathematics review and extend competencies that support graduate study and research in mathematics education, statistics,
computing, and in other fields such as science education, measurement, and evaluation.

MSTM 4031. Number theory (3)
Professor Walker, Dr. Grabois. Primes, composites, divisibility and factorization, congruence, historical topics.

MSTM 4034. Exploring secondary school mathematics (2-3)
Professor Karp. For students who are preparing to teach in secondary school. The mathematical content of advanced secondary school mathematics and the development and application of fundamental ideas in mathematics.

MSTM 4038. Finite mathematics (3) Faculty. Statements, propositions, and sets; vectors and matrices; probability. Applications: finite Markov chains, game theory.

MSTM 5027. Numerical methods and computability (3)
Faculty. Number representation; uncertainty and error; numerical solution of algebraic equations and systems; numerical calculus; numerical solution of differential equations.

## MSTM 5030. Topics in probability

theory (2-3)
Dr. Landau. Simple, compound, and conditional probabilities and applications. Doctoral students should register for MSTM 6030.

MSTM 5031. Topics in the foundations of mathematics (3)
Professor Vogeli, Dr. Smith. Propositional and predicate calculi, set theory, axiomatics, order types, the linear continuum and Goedel's theorem.

MSTM 5032. Topics in geometry/topology (3)
Professor Karp, Dr. Grabois, Dr. Malkevich.
Foundation of geometry/topology. Emphasis upon the relationship between topology and geometry and other mathematical areas.

MSTM 5033. Topics in algebra (3)
Dr. Landau, Dr. Grabois, Professor Vogeli. Groups, rings, fields. Doctoral students should register for MSTM 6033.

MSTM 5034. Topics in analysis (3)
Dr. Smith, Dr. Pollak. Real or complex functions and their properties. Doctoral students should register for MSTM 6034.

## MSTM 5035. Topics in mathematical

 modeling (3)Dr. Pollak, Dr. Malkevitch. Simulation, information theory and coding, stochastic models, probabilistic systems, simple harmonic motion.

MSTM 5036. Topics in discrete mathematics (3)
Dr. Pollak. Discrete mathematics, combinatorics, graph theory.
*MSTM 5037. History of mathematics (3) Professor Karp, Dr. Smith. Historical develop-
ment of major ideas in mathematics. Contributions of noteworthy mathematicians. Analysis of mathematical classics.

MSTM 5038. Topics in mathematical logic (3)
Dr. Smith. Prepositional calculus, Church-
Turing thesis, Goedel's incompleteness theorem.

MSTM 5126. Mathematical foundations of statistics (3)
Faculty. Prerequisite: MSTM 5030 or MSTM 6030. Estimation, hypothesis testing, and tests based on the chi-square distribution. The normal distribution and its applications. Analysis of variance and regression. Doctoral students should register for MSTM 6126.

MSTM 6030. Advanced topics in probability theory (2-3)
Dr. Landau. Open only to doctoral students.
Emphasis on proof and advanced applications.
MSTM 6032. Advanced topics in geometry/topology (3)
Professor Karp, Dr. Malkevich. Foundation of geometry/topology. Emphasis upon the relationship between topology and geometry and other mathematical area.

MSTM 6033. Advanced topics in algebra (3) Professor Vogeli, Dr. Smith, Dr. Grabois. Open only to doctoral students. Advanced study of groups, rings, and fields.

MSTM 6034. Advanced topics in analysis (3) Dr. Smith. Open only to doctoral students. Advanced study of real or complex functions.

MSTM 6035. Advanced topics in mathematical modeling (3)
Dr. Pollack, Dr. Malkevitch. Open only to doctoral students. Advanced study of simulation, information theory and coding, stochastic models, probabilistic systems, simple harmonic motion.

MSTM 6036. Advanced topics in discrete mathematics (3)
Dr. Pollak. Open only to doctoral students.
Advanced study of discrete mathematics, combinatorics, and graph theory.

MSTM 6126. Advanced topics in the mathematical foundations of statistics (3) Dr. Smith. Open only to doctoral students. Prerequisite: MSTM 5030 or MSTM 6030. Advanced topics including hypothesis testing, distribution theory, and analysis of variance and regression.

## Preservice Mathematics <br> Teacher Education

MSTM 4005. Teaching mathematics in diverse cultures (2-3)
Professor Vogeli. Principles, techniques, and issues in the teaching of mathematics in other
cultural and national settings. Study tour of schools and institutions in various nations.

MSTM 4023. Mathematics for exceptional students (1-3)
Faculty. Content, methods, and instructional models for teaching exceptional students, including LED, LD, and MT students.

MSTM 4760. Student teaching in mathematics (2 or 4)
Faculty. Permission required. Prerequisite: MSTM 5011. Open only to students enrolled in the preservice program. Students do supervised teaching in metropolitan area schools.

MSTM 5010. Mathematics in the elementary school (3)
Dr. Garrity. Problems, issues, and methods in the teaching and supervision of elementary school mathematics.

MSTM 5011. Mathematics in the secondary school (2-3)
Dr. Weinberg. Problems, issues, and methods in the teaching and supervision of secondary school mathematics. Includes field experiences. Required for preservice students.

MSTM 5061. Research, evaluation and policy in mathematics education (3) Faculty. Theory and methods of evaluating pupils and programs in the cognitive and affective domains. The roles of research and policy in evaluation of mathematics outcomes.

MSTM 5264. Guided supervision of student teaching in mathematics (2) Faculty. Permission required. Open only to doctoral students. Guided field experience in supervising student teachers.

## Independent, Advanced, and Dissertation Study

MSTM 4901. Guided study in mathematics education (1-6)
Faculty. Permission required from the instructor with whom the student wishes to work. Independent study in selected areas.

## MSTM 5800-MSTM 5801. Mathematics

 colloquium (1-3)Dr. Pollak. Lecture series featuring presentations by distinguished guest speakers.

MSTM 6400. Internship in mathematics education (1-6)
Faculty. Permission required. Supervised intern service in a variety of field settings including classroom teaching at various levels, supervision, curriculum development, and inservice education.

## MSTM 6500-MSTM 6501. Research

 seminar in mathematics education (1-3) Faculty. Permission required. Research oriented seminars dealing with a variety of issues and leading to preparation of preliminary proposalsfor the doctoral dissertation. Required for doctoral students.

MSTM 6901. Research and independent study in mathematics education (1-6) Faculty. Permission required. Guided independent study leading to the preparation of a major project or paper. May be taken repeatedly by doctoral candidates engaged in research.

## MSTM 7500. Dissertation seminar

 in mathematics education (3)Faculty. Development of final doctoral dissertation proposals and presentation of proposals for departmental review.

MSTM 8900. Dissertation advisement in mathematics education (0)
Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

MSTM 9900. Research and independent study in mathematics education (1) Faculty. Permission required. Open to post-doctoral students accepted for study at Teachers College.

## SCIENCE EDUCATION

Program Coordinator:
Professor Felicia Moore Mensah

| Program Office: | (212) 678-8174 |
| :--- | :--- |
| Fax: | (212) $678-8145$ |
| Email. | tcscience@tcedu |

tcscience @tcedu
Website: www.tc.edu/mst/scienceed
Initial Science Education M.A. applicants
may refer admissions questions to
tcscience@tc.edu

## Degrees Offered:

INITIAL CERTIFICATION.
Biology 7-12 (SCIB-INIT)
Chemistry 7-12 (SCIC-INIT)
Earth Science 7-12 (SCIE-INIT)
Physics 7-12 (SCIP-INIT)
Master of Arts (M.A.)
TRANSITIONAL B-
Biology 7-12 (SCIB-TRAN)
Chemistry 7-12 (SCIC-TRAN)
Earth Science 7-12 (SCIE-TRAN)
Physics 7-12 (SCIP-TRAN)
Master of Arts (M.A.)
SUPERVISOR/TEACHING OF SCIENCE (SCSS)
Master of Arts (M.A.)
TEACHER EDUCATION IN SCIENCE (SCTE)
Master of Science (M.S.)
Master of Education (Ed.M.)
SCIENCE EDUCATION (SCSD)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

SCIENCE AND DENTAL EDUCATION (SCDT)
Master of Arts (M.A.)

## Program Description:

The Science Education Program at Teachers College was one of the first in the nation to encompass both professional teacher education and a research-based doctoral program that prepares leaders for science education roles in precollege and higher education. The guiding principle for our program offerings is that professional science educators should be thoroughly educated in their content discipline and bring modern theories of learning and education to bear on their scholarship as professional teachers and in their research for the doctoral degree.

Master's-level offerings in science content are coordinated with methodology and supervision appropriate for both initial and professional teachers. Advanced masters' and doctoral pro-
grams complete preparation for a variety of positions including teaching, supervisory, and research roles spanning the elementary through college levels of instruction. Some courses offered through these programs are designed especially for students from other areas of study at Teachers College (for example science education methods for elementary school teaching) who need to acquire knowledge and skills in science but who do not wish to earn a degree in these areas.

Our graduates have been appointed in major universities as science and/or science education professors. Many of our graduates have become major leaders in school leadership and educational reform nationally and internationally. Our work in reforming urban science education and broadening the scope of the theoretical base for teaching and learning in science has become more sharply focused in recent years to include neurocognitive, multicultural, and learning theory based innovations in guiding teaching and research.

## Special Application <br> Requirements/Information:

Preference in scholarship awards will be for those applicants who meet the early deadline. Applicants who wish to receive New York State teaching certification must apply to the M.A. degree program in a science content area. Science education students seeking M.A., Ed.M., M.S., Ed.D., and/or Ph.D. degrees should have at least the equivalent of an undergraduate degree in the sciences.

Ed.D. and Ph.D. applications are reviewed once a year for study beginning in the fall. All other programs admit students on a rolling basis. See the Admissions section of this bulletin for application deadlines as advertised by the college.

## Master Degree Requirements:

## Master of Arts

Emphasis is placed on those competencies necessary for effective science teaching as a means of enhancing professional growth of in-service and pre-practice through group and individualized instruction in a general methods course and in courses applicable to specific sciences.

In order to meet New York State Certification requirements, the M.A. degree is comprised of 36 credits of coursework in the areas of professional education, science content, and science methods. In consultation with your advisor upon acceptance to a degree, a program plan will be outlined based on your specific content certification area.

For preservice candidates, i.e., those who intend to fulfill the requirements of New York State for initial certification to teach science in secondary schools, MSTC 4000 and MSTC 4363 are required and should precede the semester in which student teaching is completed. MSTC 4000 and MSTC 4363 are both offered in the fall and student teaching in the spring.

Other requirements that must be met before graduation include completion of a science safety workshop, successful completion of the program's Gateway Performance Assessments for Teaching, and a Final Master's Portfolio Project. See the Teacher Education section of this bulletin for details on other requirements.

Initial Science Education M.A. applicants may refer admissions questions to the program coordinator at tcscience@tc.edu.

## Master of Arts in Science and Dental Education

This degree is offered in conjunction with the College of Oral and Dental Medicine of Columbia University. Students in the College of Oral and Dental Medicine at Columbia University who are planning to enter teaching of dental medicine are eligible to enroll for this degree. The curriculum includes content courses in dental medical science, basic courses in adult learning, teaching of science-related disciplines, and culminating research studies on current medical educational theory and practice. Candidates are prepared for a life-long commitment to scholarly reflection and practice as professors of oral and dental medicine.

Inquiries should be sent to Professor O.R. Anderson (ora@LDEO.columbia.edu).

## Master of Science and Master of Education

The Science Education program offers curricula leading to a Master of Science (M.S.) degree and a Master of Education (Ed.M.) degree. Both programs require a minimum number of graduate points of coursework and a master's paper.

The M.S. and Ed.M. degrees require a program planned in consultation with an advisor who may also sponsor the master's paper. The M.S. degree requires more science subject matter coursework than the Ed.M. degree, while the Ed.M. degree requires more intensive work in education including science education. The M.S. degree is recommended for science educators who want a professional degree with intensive preparation in science subject matter. This degree is especially appropriate for prospective community college instructors who do not intend to pursue a doctorate immediately. The Ed.M. degree is recommended for science educa-
tors who want a professional degree with intensive preparation in science education. Both programs include some depth of study in science, work in the candidate's specialization, and the development of competence in method of scholarly analysis. Some credits obtained at the M.A. level may be applied toward the Ed.M. or M.S.

## Master of Science

In total, a minimum of 60 course points are required: A minimum of 30 points in breadth of science content courses, 12 points in core science education courses, 6-9 points in professional education courses, 3-6 points in research methodology courses, and 3 points in technology courses. This leaves at most a remaining 6 points of optional studies to be determined in consultation with the advisor.

## Master of Education

In total, a minimum of 60 course points are required: A minimum of 15 points in breadth of science content courses, 15 points in core science education courses, 9 points in professional education courses, 6 points in research methodology courses, and 3 points in technology courses. This leaves 12 points of optional studies to be determined in consultation with the advisor.

Master's Integrative Project
For the M.S. and the Ed.M. degrees in the Science Education Program, a master's paper will be required. This project may be an extension of some paper that has been prepared for a course included in the program of the student. The paper may take a variety of forms. It may be a report of an empirical investigation, or it may be a library-type research paper dealing with some problem in which the candidate has a special interest. The form of the paper should be carefully chosen in the context of the candidate's professional goals.

The M.S. paper, must address a problem in science content either through scientific laboratory research, a synthesis of scientific knowledge from the literature, and/or the production of a novel model synthesizing data. The M.S. paper may be a research thesis in basic science within the candidate's field of specialization.

The Ed.M. project should focus more on science education topics and can be either a synthesis of information or an empirical study. The paper may form the basis for a subsequent doctoral dissertation. In other cases, it may be the culmination of studies that have been carried out in the 60 point master's degree program.

The paper should be planned and prepared in cooperation with a full-time member of the Science Education Program faculty. It must be approved by a full-time member of this faculty before the application is made for the degree.

Hence, the master's paper is a departmental requirement for the M.S. and/or the Ed.M. degree. Its acceptance needs to be noted on the candidate's application by faculty for the award of either the M.S. or Ed.M. degree. However, the approved paper is not to be submitted to the Office of the Registrar as part of general college-wide degree requirements but will remain in the departmental files.

## Doctoral Degree Requirements:

The Department provides programs for both the Ed.D. and the Ph.D. degrees. In general, the Ed.D. degree places emphasis on breadth of professional coursework with a focus on educational practice. All candidates are required to be competent in both quantitative and qualitative research methodology and to have knowledge of the epistemology of science and of psychology sufficient to be an informed scholarpractitioner.

All doctoral candidates must have a written program plan approved by their advisor. The approved plan should then be forwarded to the Office of Doctoral Studies. Following submission of the statement of total program, the student normally completes doctoral coursework and engages in doctoral research and writing. Refer to the Ph.D. and Ed.D. Requirements Bulletin, prepared by the Office of Doctoral Studies, for a fuller description of requirements.

## Specializations

Students enrolled in the doctoral program may specialize in an area of interest to them pertinent to science education by taking courses in their area of interest. Some potential areas to pursue include elementary school science, secondary school science, urban science education, and technology studies.

## Supervision in Schools

Students interested in science supervision in schools may elect to enroll in courses in other departments to satisfy the single school and multiple school supervisory certificates. Please see the Teacher Education section of this bulletin for updated information on programs that lead to administrative certification.

## Doctor of Education

The Science Education Program offers curricula leading to the degree of Doctor of Education (Ed.D.). This program is intended to prepare students for leadership in science education. This program is designed to prepare professional science educators who are (1) educated both broadly and deeply in science subject matter, (2) competent in methods of scholarly analysis, and (3) have a deep understanding of education and science education. Students should also consult the Requirements
for the Degree of Doctor of Education bulletin, available from the Office of Doctoral Studies, for College-wide Ed.D. requirements.

In total, a minimum of 90 course points are required: A minimum of 15 points in breadth of science content courses, 15 points in core science education courses, 12 points in professional education courses, 9 points in research methodology courses, 3-6 points in technology courses, and 6 dissertation study points. This leaves a remaining 27-30 points of optional studies to be determined in consultation with the advisor.

The student, in consultation with an advisor, plans a program of study consistent with the student's prior education and oriented toward professional goals. This program plan is approved by the advisor and then submitted to the Office of Doctoral Studies. In planning a program of study, the student would be wise to pay particular attention to the time when the certification exam is taken. Students are required to complete a minimum of 20 points after taking the certification examination for the first time, including points taken during the term in which that examination was taken.

The certification examination is ordinarily taken no later than the term in which the student completes 65-75 percent of coursework. A special certification examination is designed for each candidate. The certification exam generally takes place in the student's third year of full-time study. Please refer to the Office of Doctoral Studies bulletin and the departmental advisor for details.

## Dissertation Guidelines

The Ed.D. dissertation is a scholarly endeavor contributing new knowledge to the field and should be planned early in the doctoral program when sufficient advanced courses have been completed to permit the candidate to enroll in relevant research techniques courses and pertinent advanced study to enable efficient and high-quality preparation of the thesis. Dissertations in science education can be
(1) empirical or theoretical studies in learning,
(2) design and formative evaluation of science curricula, or (3) analytical studies in policy theory in science education. The candidate is recommended to seek an advisor within the department who can best guide the design and completion of the type of thesis chosen.

## Doctor of Philosophy

This program is designed to prepare students for leadership in science education. The program includes advanced preparation in science to develop both breadth and depth in science
subject matter background. Preparation in research methods in science education as well as study of recent developments in the broad field of professional education is included in the program. Students should refer to the bulletin, Requirements for the Degree of Doctor of Philosophy, available from the Office of Doctoral Studies, for information on admission, residence, certification, examinations, and the dissertation. The general requirement is for a minimum of 75 points of approved graduate credit, at least 45 points of which must be taken through Teachers College registration. In order that candidates become familiar with recent investigations in the broad fields of professional education, each program will include one or more courses in the nature of education and the nature of persons and the learning process.

In total, a minimum of 75 course points is required: A minimum of 15 points in breadth of science content courses, 15 points in core science education courses, 12 points in professional education courses, 12 points in research methodology courses, 3-6 points in technology courses, and 6 dissertation study points. This leaves a remaining 12-15 points of optional studies to be determined in consultation with the advisor.

## Dissertation Requirements

In addition to all other guidelines, it should be noted that the dissertation must be a research thesis based on a theoretical rationale and must exhibit thorough and comprehensive mastery of a research discipline.

## COURSES:

## Science Education Program Advisors:

Professors O. Roger Anderson, Christopher Emdin, Felicia Moore Mensah, Ann Rivet and Dr. Jessica Riccio.

For certain courses in the program in Science Education, special fees, including laboratory fees, will be assessed. The amounts and courses involved will be announced each semester in the schedule of classes for that semester.

## Core Science Education Courses

## MSTC 4000. Science in secondary school

 (3)Professor Emdin or Professor Riccio. Foundations of science education. Planning, assessment, and management of instruction. Required of initial science students.

MSTC 4001. Qualitative research methods in science education (3)
Professor Moore Mensah. This introductory course is designed to support graduate students in qualitative research methodology in
science education. It includes qualitative research design and role of theory in guiding and informing research.

## MSTC 4007. Urban and multicultural

 science education (3)Professor Emdin. Students will explore the intersections of policy, science and society and the impact these have on standard K-12 urban science curriculum and multicultural teaching practices. Drawing from scholarship in policy, curriculum, and teaching, this course explores major issues faced in urban science education, including (1) the issue of resources (physical, human, and social) in urban schools and how urban science education programs might draw from local resources in meeting the needs of urban learners, (2) the issue of what roles might teachers, administrators, policy makers, and curriculum writers play in the design and implementation of empowering curricular and pedagogical practices in urban science classrooms, and (3) the issue of multicultural science education in terms of both content and pedagogy. This course challenges commonly used practices where multiculturalism is often taught as one distinct and often separate component of the science curriculum. This course provides students with both research-based and fieldbased experiences.

MSTC 4040. Science in childhood
education (3)
Professor Moore Mensah. This is an integrated lecture/laboratory course. This course provides an introduction to the creation of science curriculum and instruction that attends to current state and national standards. The course is based in constructivist perspectives and has as a goal the teaching of science well with all children.

## MSTC 5040. Science curriculum

improvement in the elementary school (2-3) Professor Moore Mensah. This course provides an introduction to the creation of science curriculum and instruction that attends to current state and national standards at the elementary level.

MSTC 5042. Science, technology, and society (3)
Faculty. The nature and interrelationships of science, technology, and society as represented in policy and curriculum for education.

## MSTC 5047. Science teacher education

 (2-3)Faculty. MSTC 5047 is a required core course in the Science Education doctoral and advanced masters programs. The course concerns both in-service and preservice teacher education. In the course, students will conduct research with preservice teachers, as well as practicing and expert teachers. We will examine the classic and contemporary knowledge base of teacher education, as well as current issues and questions in the education of science teaching professionals. Open to students who
are not in the Science Program with the professor's permission.

MSTC 5048. Curriculum and pedagogy in science education (3)
Professor Rivet. This course offers students in the science education doctoral and advanced master's programs the opportunity to ask fundamental questions about curriculum in multiple ways.

MSTC 6502. Science education research seminar (0-3)
Professor Anderson. Research oriented seminars dealing with a variety of issues and leading to preparation for the doctoral certification examination. Required for doctoral students.

## Disciplinary Courses

MSTC 4043. Science and the environment (2-3)
Faculty. Exploration of environmental science from an earth physiology perspective. Focus on connections between contemporary environmental issues and environmental science concepts. A community study utilizing scientific inquiry procedures and applying pertinent environmental science concepts will be conducted.

## MSTC 4044. Biology methods and

 curriculum laboratory (3)Faculty. Theoretical basis of secondary school science education and its practical application to biology teaching and laboratory experiences.

MSTC 4045. Earth science methods and curriculum laboratory (3)
Professor Rivet. Theoretical basis of secondary school science education and its practical application to earth science teaching and laboratory experiences.

## MSTC 4046. Chemistry curriculum

 and methods laboratory (3)Faculty. Individualized work with secondary chemistry curricula, stressing laboratory activity.

MSTC 4047. Physical science curriculum and methods laboratory (3)
Faculty. Discussion of middle or secondary school curricula each offered in separate semesters, stressing laboratory activity. May be taken twice, once for each grade level.

MSTC 4048. Structure of science knowledge and curriculum design (2-3)
Faculty. Analyses of the organization of and relationships between concepts, laws, and theories in the life and physical sciences, using a variety of analytical techniques suitable for curriculum design.

MSTC 4049. Middle school living environment methods laboratory (3)
Professor Riccio. Discussion of middle school life science methods.

MSTC 4051. Microbial ecology (2-3)
Professor Anderson. The physiological ecology and life history of free-living and parasitic protista.

MSTC 4052. Plant biology (2-3)
Professor Anderson. Introduction to plant physiological ecology with an emphasis on global systems. Laboratory sessions to be announced.

## MSTC 4054. Human anatomy and

## physiology (2-3)

Faculty. Prerequisite: A basic biology course. A survey of major organ systems and their physiology. Suitable for a wide variety of professionals in physical education, nursing, health, nutrition, and science.

## MSTC 4055. Concepts in biology (3)

Professor Anderson or Professor Moore Mensah. Professional content knowledge course examining the major concepts in biology and their applications in teaching secondary school biology.

MSTC 4056. Concepts in earth science (3) Faculty. Study of models of our planet, Earth in space, and weather and climate.

MSTC 4057. Concepts in earth science II (3) Faculty. Study of earth materials and processes shaping the surface, interior, and geologic history of the Earth.

MSTC 4059. Concepts in chemistry I (3) Dr. Wang. Prerequisite: one year of college chemistry. The growth of, and change in, the major concepts of the science of chemistry are explored, from the Greek philosophers to the alchemists to those of modern chemistry. Concepts explored include chemical composition and the elements; chemical change, the acids, activity; the nature of matter; and the structure of the atom and bonding.

MSTC 4060. Concepts in chemistry II (3) Dr. Wang. Prerequisite: MSTC 4059 or instructor permission. The historical development of selected chemical concepts are examined with respect to the arguments developed in their support, with the intent that current meanings will be elucidated in the process.

MSTC 4075. Concepts in physics I (3)
Dr. Brunschwig. Exploration of physics themes of molecules and molecular kinetic theory, heat, mechanics, waves, electricity and magnetism, and modern physics. Of particular interest to introductory physics, physical science, and general science teachers.

MSTC 4076. Concepts in physics II (3)
Dr. Brunschwig. Exploration of electricity, magnetism, light, optics, quantum mechanics, and selected topics in atomic, nuclear, elementary particle physics and astrophysics.

MSTC 4140. Laboratory methods and experiences for elementary school teachers (1) Faculty. Corequisite: MSTC 4040. Demonstration of teaching science from constructivist perspectives. Focus on teachers and children learning science through inquiry.

MSTC 4151. Modern principles of evolution (2-3)
Faculty. Interdisciplinary study of scientific theories about origin and evolution of life on Earth. Includes demonstration and laboratory experiments.

MSTC 4152. Modern concepts in genetics (2-3)
Faculty. A survey of modern principles of genetics, including molecular genetics, behavioral genetics, and relationship to Mendelian genetics.

MSTC 4153. Invertebrate biology (2-3) Faculty. A survey of major invertebrate groups, including phylogeny, morphology, and ecology, with examples suitable for biological education.

MSTC 5041. The nature and practice of science (3)
Faculty. This course is one of the required core courses in the science education doctoral and advanced master's programs. It is designed to help students develop an adequate understanding of the nature of science or of how science is practiced. In this course, through the analysis of a number of current issues and problems in science and the extensive use of case studies, students will address questions such as What is science? What distinguishes science from other ways of knowing? What standards of evidence and scientific explanations, processes, and conventions are used in science? What philosophical, social, ethical, and historical perspectives are important in understanding the nature of science?

MSTC 5046. Advanced chemistry methods and curriculum laboratory (3)
Faculty. Permission required. Prerequisite:
MSTC 4046 or equivalent. Individualized work with advanced topics from secondary chemistry curricula, stressing laboratory activity.

MSTC 5052. Principles of biochemistry (2-4) Professor Anderson. Major principles of biochemistry including biochemical reactions, pathways, enzyme catalysis, and application of physical chemistry concepts such as energetics, redox potentials, standard free energy changes, and kinetic theory to biologically significant chemical processes with relations to cellular biology. Students can do an additional project for 4 points.

MSTC 5056. General oceanography (3) Dr. Marrero. Explore physical, earth, and life science content topics through a study of Earth's most visible feature. Particular attention paid to modern socioscientific issues such as coastal development, pollution, and management of energy resources.

MSTC 5058. Advanced topics in earth and environmental sciences (3) Faculty. Permission required. Prerequisite: MSTC 4056, MSTC 4057, MSTC 4558, or equivalent. New concepts in geology, oceanography, and environmental sciences explored in lecture and laboratory setting. Occasional field trips.

## Field-Based Courses

MSTC 4363. Introduction to science education practice (3)
Faculty. Corequisite: MSTC 4000. Directed field experiences and seminars explore school environments and teaching strategies.

MSTC 4761. Student teaching in science (6) Professor Riccio. Permission required. Prerequisites: MSTC 4000 and MSTC 4363. Students do supervised teaching in metropolitan area schools.

MSTC 5265. Guided supervision of student teaching in science (1-2)
Faculty. Permission required. Open only to doctoral students. Guided field experience in supervising student teachers.

MSTC 6401. Internship in science education (1-6)
Faculty. Permission required. Supervised intern service in a variety of field settings including classroom teaching at various levels, supervision, curriculum development, and in-service education.

## Independent, Advanced and Dissertation Study

## MSTC 4852. Informal science education

 (1-2)Faculty. Study of museums.
MSTC 4902. Guided study in science education (3)
Dr. Wang. Permission required from the instructor with whom the student wishes to work. Independent study in selected areas. Use of professional laboratory facilities.

MSTC 5000. Neurocognitive models of information processing (1-3) Professor Anderson. Permission required. An analysis of emergent theory in neuroscientific bases of cognition with applications to science education.

MSTC 5044. Selected topics and issues in science education (1-3) Faculty. Permission required. A focus on special issues in science education (curriculum, instruction, assessment, research, or content) which changes from one semester to another, highlighted by current research and interest.

MSTC 6902. Research and independent study in science education (1-6)
Professor Anderson. Permission required. Guided independent study leading to the preparation of a major project or paper. May be taken repeatedly by doctoral candidates engaged in research.

## MSTC 7501. Dissertation seminar in

 science education (1-3)Professor Anderson. Development of doctoral dissertation proposals and presentation of proposals for departmental review.

MSTC 8901. Dissertation advisement in science education (0)
Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

MSTC 9901. Research and independent study in science education (1 or more) Faculty. Permission required. Open to postdoctoral students accepted for study at Teachers College.

# Organization and Leadership 

TELEPHONE NUMBER: (212) 678-3258
WEBSITE: www.tc.edu/oEl

## PROGRAMS:

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## DEPARTMENTAL MISSION:

The mission of The Department of Organization and Leadership is to educate, train, and serve current and future leaders. They include: administrators, policy makers, researchers, psychologists, and educators from around the world. Our students are, or aspire to be, in the fields of public and private education, higher and postsecondary education, adult education, health administration, politics, advocacy, organizational behavior, and organizational development and change. We educate, train, and serve:
(1) Leaders, managers, and administrators for all types of organizations, with an emphasis on educational and nonprofit institutions and health organizations in both the private and public sectors;
(2) Those who help these leaders, managers, and administrators; and
(3) Those who conduct research pertinent to organizational dynamics and learning, and who teach leadership, administration, education policy, politics, organizational behavior, and organizational change.

To accomplish this mission the Department provides programs in Adult Learning and Leadership, Education Leadership, Nurse Executive Education, Higher and Postsecondary Education, Politics and Education, and Social-Organizational Psychology.

## FACULTY:

## PROFESSORS:

Joel Brockner
(Phillip Hettleman Professor of Business,
Graduate School of Business, Columbia
University Social-Organizational
Psychology)
W. Warner Burke
(Social-Organizational Psychology)
Pearl Rock Kane
(Education Leadership)
L. Lee Knefelkamp
(Social-Organizational Psychology)
Victoria J. Marsick
(Adult Learning and Leadership)
Anna Neumann
(Higher and Postsecondary Education)
Craig E. Richards
(Education Leadership)
Elaine La Monica Rigolosi
(Nurse Executive)
Loriann Roberson
(Social-Organizational Psychology)
Thomas Sobol - Emeritus

## VISITING TISCH PROFESSOR:

Penny Wohlstetter

PROFESSORS OF PRACTICE:
William Pasmore
(Social-Organizational Psychology)
Robert Weintraub
(Education Leadership)
VISITING PROFESSOR OF PRACTICE:
Eric Nadelstern
(Education Leadership)

## ADJUNCT PROFESSORS:

Robert Anderson
(Education Leadership)
Michael Bazigos
(Social-Organizational Psychology)
Robert Beodeker
(Education Leadership \& Social-
Organizational Psychology)
Marc Brackett
(Education Leadership)
Stephen D. Brookfield
(Adult Learning and Leadership)
David L. Buckner
(Social-Organizational Psychology)
Audrey Charlton
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(Nurse Executive)
Keville C. Frederickson
(Nurse Executive)
Neil Grabois
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Judith Glazer-Raymo
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G. Kennedy Greene
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Scott Hollinger
(Education Leadership)

David Levinson
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Stacey E. Lutz
(Social-Organizational Psychology)
Eric Marcus
(Education Leadership)
Nino Nanarone
(Education Leadership)
Robin Stern
(Education Leadership)
Ross Tartell
(Social-Organizational Psychology)
Stephen Temlock
(Social-Organizational Psychology)
Matthew Tye
(Social-Organizational Psychology)
Mario Torres
(Education Leadership)

## ASSOCIATE PROFESSORS:

William J. Baldwin
(Higher and Postsecondary Education)
Caryn J. Block
(Social-Organizational Psychology)
Madhabi Chatterji
(Education Leadership)
Peter T. Coleman
(Social-Organizational Psychology)
Eleanor Drago-Severson
(Education Leadership and
Adult Learning and Leadership)
Debra A. Noumair
(Social-Organizational Psychology)
Elissa Perry
(Social-Organizational Psychology)
James D. Westaby
(Social-Organizational Psychology)
Lyle Yorks
(Adult Learning and Leadership)

## RESEARCH ASSOCIATE PROFESSOR:

Martha Gephart
(Adult Learning and Leadership)

## ADJUNCT ASSOCIATE PROFESSORS:

Cynthia Caroselli (Nurse Executive)
Kathleen Gialanella (Nurse Executive)
Daryll Mattingly (Education Leadership)
Gibran Majdalany (Education Leadership)
Paul O’Neill (Education Leadership) Sheila O'Shea Melli (Nurse Executive)
Vincent Rudan (Nurse Executive)
Elena Sigall (Education Leadership)
Svetlana T. Shmulyian
(Social-Organizational Psychology)
Marvin Sontag (Education Leadership)
Nancy Streim (Education Leadership)

## ASSISTANT PROFESSOR:

Janice Robinson
(Higher and Postsecondary Education)

## ADJUNCT ASSISTANT PROFESSORS:

Michel Alhadeff-Jones
(Adult Learning and Leadership)
Linda Bloomberg
(Adult Learning and Leadership)
Connie Chartrand
(Adult Learning and Leadership)
Monica Christensen
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Kim Mendez (Nurse Executive)
Vanessa Morest
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Mark Neustadt (Education Leadership)
Laurie Nisco
(Social-Organizational Psychology)
Judith O'Neil
(Adult Learning and Leadership) Judith Parker
(Adult Learning and Leadership,
Nurse Executive)
Thomas Rock
(Higher and Postsecondary Education)
David Severson
(Adult Learning and Leadership)
Julie Schell (Higher and Postsecondary
Education)
Elana Sigall (Education Leadership)
Kevin Paul Scully
(Adult Learning and Leadership)
Julia Sloan
(Adult Learning and Leadership)
Corlisse Thomas
(Higher and Postsecondary Education)
Marie P. Volpe
(Adult Learning and Leadership)
Janet Youngblood
(Adult Learning and Leadership)

## LECTURERS:

Patrick Bassett (Education Leadership)
Jeanne E. Bitterman
(Adult Learning and Leadership)
Sarah Brazaitis
(Social-Organizational Psychology)
Gina Buontempo
(Social-Organizational Psychology)
Beth Fisher-Yoshida
(Social-Organizational Psychology)
Arthur M. Langer
(Adult Learning and Leadership and
Higher and Postsecondary Education, and Nurse Executive)
Terrence Maltbia
(Adult Learning and Leadership)
Brian Perkins (Education Leadership)
Rachel Seher (Education Leadership)

## INSTRUCTORS:

Milagros Castillo
(Higher and Postsecondary Education)
Katharine Conway
(Higher and Postsecondary Education)
Sarah Daignault (Education Leadership)
Karren Dunkley (Education Leadership)
Frank Golom
(Social-Organizational Psychology)
Jonah Liebert (Education Leadership)
Rebecca Natow
(Higher and Postsecondary Education)
Megan Silander (Education Leadership)
Kent Strong
(Social-Organizational Psychology)
Miya Warner (Education Leadership)

## TC FELLOW:

Fanon Howell (Education Leadership)
For information about faculty and their scholarly and research interests, please refer to the Faculty section of this bulletin, or visit us at www.tc.edu/faculty.

## Departmental Policies for Student Progress and Degree Completion In Organization and Leadership

In addition to the College policies for student progress and degree completion, students within the Department of Organization and Leadership who were admitted to a degree program in the department as of Fall Term 2005 or later, must also meet the following requirements:
A. All masters and doctoral students must enroll for a minimum of 6 points per academic year. However, once a doctoral student is obligated for continuous doctoral dissertation advisement, students must satisfy the requirements for continuous registration as outlined in the College requirements.
B. All masters and doctoral students must maintain a minimum GPA of B (exclusive
of Pass/Fail courses) for all courses registered through Teachers College.
C. All requests for retroactive registration must receive the approval of the faculty advisor, Program Coordinator and Department Chair before submission to the Office of the Registrar.
D. Ed.D. students must complete all requirements for the Ed.D. within 8 years from their term of matriculation.
E. Ed.D. students must take the certification exam once they have completed 70 points of coursework (both TC credits and those transferred in), or within 3 years of term of matriculation, whichever comes first. Students must complete the remaining minimum of 20 points toward their Ed.D. requirements within the initial period of certification (four to six years).
F. Whether a student sits for the certification examination will be at the discretion of the student's advisor. If the student has more than 3 points of Incomplete grades but the advisor does not believe this poses a problem, then the student may still sit for the certification exam. However, under College policy, any doctoral student who has 6 or more points of Incomplete grades as part of the program of study may not sit for the certification examination.
G. An Ed.D. student will be recommended for certification, for the purpose of determining when the obligation for continuous enrollment in doctoral dissertation advisement begins when he/she has passed both parts of the certification exam, has submitted a program plan, and has been formally recommended for certification by the Program.
H. After having passed part one of the certification examination, the student has a year to take the remaining steps to secure full certification, including completing part two of the certification examination and submitting a program plan.
I. All Ed.D. candidates must complete their Ed.D. degree requirements by the expiration date of their period of certification. Ed.D. candidates who have not completed their degree during this time but have registered and completed a course during the last five years may petition for an extension if they are in good standing and have satisfied the college requirements for continuous enrollment for doctoral dissertation advisement, if applicable. Petitions for extensions may be obtained in the Office of Doctoral Studies.

Students filing for an extension must:

1. Have adequate and acceptable reasons.
2. Have been registered and completed a course within the last 5 years.
3. Provide a feasible plan for degree completion.
4. Obtain the approval of their faculty advisor, Program Coordinator and Department Chair. Any petitions not accompanied with appropriate approvals will be invalid.
5. Students filing petitions for extensions may be required to retake courses, or to undertake additional coursework, as specified by faculty advisor, Program Coordinator, and/or Department Chair.
6. Petitions for extensions must be filed within six months of expiration of period of certification.
7. Students are limited to a maximum of two petitions for extensions, which will not exceed more than two years total.

## Departmental Core Requirements:

The Department requires that all students, regardless of degree or program, complete an overview in a research methods course. Organizational Psychology majors are required to take ORLJ 4009 which emphasizes experimental and quasi-experimental research designs. Other majors are strongly advised to take ORL 5521 which emphasizes applied research designs.

All Ed.D. students are required to complete an introductory statistics course and a two-course sequence in research design (data collection and analysis) in a methodology that is relevant to their dissertation. Students should work with their advisor and dissertation sponsor to select one of seven possible methodological designs: experimental and quasi-experimental survey research, applied qualitative research, ethnography, evaluation, action research, and historical research.

ORL 5521. Introduction to research and organizational studies (2-3)
Faculty. This course meets a departmental requirement for an introductory course on empirical research in education and organizational studies. The goal is to help students be able to access, comprehend, synthesize, and utilize research, to support and facilitate the research efforts of others, and to begin to prepare to conduct their own research. Students read exemplars of published research, along with texts about research design, data collection and analysis, and strategies for assessing the validity and trustworthiness of research. The course covers qualitative, quantitative, and mixed methods approaches to research, such as experiments, surveys, case studies, ethnography, and action research.

ORL 5522. Evaluation methods I (3)
Professor Chatterji. Provides an overview of major evaluation models and social research methods useful in developing, monitoring and studying effects of programs, services and institutions in education, health and other fields. This is the second course in a three-course
sequence in assessment and evaluation methods offered through the Organization and Leadership department. The prerequisite is the 4000 -level course on testing, assessment and accountability or an instructor-approved substitute. Offered twice annually.

## ORL 5523. Evaluation methods II-

## Seminar (3)

Professor Chatterji. This evaluation research seminar, conducted in actual client contexts, provides laboratory and field experiences in planning, designing, execution, and reporting of various components of evaluations. This course is the third and culminating course in a threecourse sequence in assessment and evaluation methods offered through the Organization and Leadership department. The prerequisite is ORL 5522, Evaluation methods I or an instruc-tor-approved substitute. Offered once biennially, typically in fall.

## ORL 5524. Instrument design and

 validation-Seminar (3)Professor Chatterji. Provides hands-on seminar experiences in the design and validation of instruments to measure educational, psychological , health and social contracts. The type of instrument can vary according to student interests (e.g., multi-part surveys, attitude scales, behavior ratings scales, performance assessments or tests of cognitive abilities and achievement). The prerequisites are intermediate level courses in measurement/statistics or instructor-approved substitutes. Offered once biennially, typically in the fall.

ORL 6500. Qualitative research methods in organizations: Design and data collection (3) Professor Yorks. An introduction to qualitative research methods conceptualization and data collection procedures and design. Students learn various qualitative data collection techniques and conduct a pilot study.

ORL 6501. Qualitative research methods in organizations: Data analysis and reporting (3) Professor Marsick and Dr. Maltbia. Prerequisite: ORL 6500 . Strategies and procedures for qualitative data analysis, within and across case studies, individual and group interview analyses, data display, and methods of presenting and reporting findings.

ORL 6518. Methods of case study and analysis (3)
Faculty. Techniques and methods of preparing and analyzing case studies of organizations and institutions.

ORLJ 4009. Understanding behavioral research (3)

ORLJ 5018. Using survey research in organizational consulting (3)

## Adult Learning and Leadership

The Adult Learning and Leadership area of study includes the following programs: Adult Learning and Leadership and Adult Education Guided Intensive Study (AEGIS).

## ADULT LEARNING AND LEADERSHIP

Program Coordinator:
Professor Victoria J. Marsick
Program Office: (212) 678-3760
Email: $\quad$ al\&l@tc.edu
Website: www.tc.edu/o\&l/AdultEd

## Degrees Offered:

ADULT LEARNING AND LEADERSHIP (ADUL)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## Program Description:

Our program prepares leaders who help adults improve the way they live and work through more effective instrumental learning, but we do not stop there. A hallmark of our programs is the fostering of transformative learning. Through transformative learning:

- Adults are helped to identify, probe and change assumpions, values, and beliefs that shape how they think, act, and learn;
- Adult educators are helped to transform organizations, institutions, learning communities and other settings that influence learning and change.

The mission of the program is to empower graduates as facilitators of learning across the lifespan- in and outside of classrooms and virtual learning spaces. We emphasize leadership for reflective proactive and transformational learning. Our students help individual adults learn, and they help organizations, institutions, and communities learn from and with those adults. Hence, our focus on adult education and organizational learning that shapes, and is shaped by diverse views and cultures through societal learning.

Graduates from our programs lead, manage, design, deliver, or evaluate learning initiatives. They can be scholars, researchers, evaluators, executives, and learning and development professionals. They work in a wide range of settings: schools, second-chance adult basic education, health care organizations, not-forprofits, government agencies, learning commu-
nities, businesses, continuing professional education, and special programs for adults in postsecondary education.

Our mission fits with the mission of the College because we support learning across the lifespan with an eye to how adult learning shapes, and is shaped by, societal learning and change.

The intellectual framework of the program examines the relationship of adult learning to organizational, management, and leadership issues. The framework prepares individuals as leaders, managers, and facilitators of learning in relation to lifelong learning, continuing education, and learning from experience at work. The curriculum is designed around levels of learning, development, and change for individuals, groups, and organizations as a whole. Also in focus are the ways in which individual learning can be supported, nurtured, shared, and utilized by larger social units in today's knowledge society.

The Adult Learning and Leadership Program appeals to professionals who design, develop, and evaluate programs that meet the learning needs of adults in both face-to-face and on-line formats. They include educators of adults who learn in the following settings:

- Organizations in the profit, and not-forprofit, or public sectors;
- Religious and community-based organizations;
- Basic education classes (literacy, General Education Diploma);
- Returning adult students with specialized needs in postsecondary education; and
- Continuing professional education.

The 45 -point M.A. program is most appropriate for educators who are involved in the design, management, and delivery of learning. The 60 -point Ed.M. and 90 -point Ed.D. options are appropriate for professionals who are involved in policy development, strategy, change management, and systems-level learning. The program prepares educators who work with the following groups:

- Leaders who shape adult education policy and program development, as well as those who act as trainers and coaches to these leaders; and
- Designers, planners, managers, and developers who are innovating with new delivery models.


## Specialization in Medical Education, Healthcare and Adult Learning

This specialization is designed for those who facilitate health and medical education with staff, clients, patients, and teams of healthcare providers. It is inspired by a global independent
commission for reassessing education of health professionals. The specialization requires fulfilling core program requirements. Specialization courses and electives are tailored to healthcare, including for example, courses in problembased learning in medical contexts, facilitating adult learning in health care and medical education contexts, and a sequence of newly developed clinical practica (ORLD 5301, 5302, 5303) on education and supervision for medical educators, chaplains and counselors, and other allied health workers. Courses with a healthcare and medical education focus can also be taken from TC programs in health education, counseling, nursing and biobehavioral studies; as well as through links with Columbia University, College of Physicians and Surgeons.

## Special Application <br> Requirements/Information:

For the program in Adult Learning and Leadership, the following information applies:

- An academic writing sample is required for Ed.M. and Ed.D. applicants; an academic writing sample is not required for M.A. applicants. The academic writing sample could be a published or unpublished paper that demonstrates clear, logical, conceptual, and analytical thinking, as well as the proper use of citations and references. Papers written for graduate courses are good academic writing samples; memos or reports, curriculum materials, and other practical writing materials are not.

If applicants wish, they can meet the academic writing sample requirement by submitting a well-constructed essay of 10-12 double-spaced pages, identifying and discussing a challenge they face in the practice, organization, community, or society in which they work. These challenges may include, among others:

- Meeting lifelong learning needs of adults in the knowledge era;
- Valuing and working with the diversity of adult learners;
- Crafting effective strategies for learning that take into account leadership, structural and cultural factors in the groups, communities, or organizations in which adults live or work;
- Using technology to meet diverse adult learning needs; and
- Working with populations that have challenges with English as a first or second language.

Your essay should achieve the following:

- Describe the challenge and the context in which it occurs;
- Discuss your role and that of other relevant stakeholders;
- Discuss the various positions that stake-
holders take regarding the challenge, and the various options that can be exercised to address the challenge; and
- Identify and relate your discussion to selected relevant theories and research to build your argument.
Applicants should pay attention to factors that underlie your thinking and judgments about this challenge, for example, your beliefs and assumptions or those of others; and political, cultural, or other contextual factors. Include a bibliography that is properly formatted in APA, Chicago, or MLA style.


## Degree Requirements:

The M.A., Ed.M., and Ed.D. programs in Adult Learning and Leadership are structured around core courses, a core research sequence, concentration courses, and electives. A culminating project is required at all times. At the M.A. level, the project is usually an application of what has been learned to real world problems or concerns. The Ed.M. project and the Ed.D. dissertation are research-focused.

Required core courses can be selected in the areas of leadership, strategy and management, adult learning, human resource development, group dynamics, organizational behavior, and technology for learning or management. At least one course is to be taken (or in some cases, transferred from prior accredited graduate study) in each of these seven areas no matter what the degree level. Many courses are offered by the Program or the Department; other courses can be taken elsewhere in Teachers College or Columbia University.

The following courses illustrate offerings in each required area.

## Required Core Courses (21-30 points)

Leadership (minimum of 3 points):

| - ORLD 5023 | Leadership and |
| :--- | :--- |
| - ORLJ 5005 | Leadevelopment (3) <br> - ORLD 582 581 |
| vision (3) <br> Leveraging emotional <br> intelligence (EQ) to <br> enhance organizational <br> effectiveness (3) |  |

Strategy and Management (minimum of 3 points):

- ORLD 5054 Strategy development as a learning process in organizations (3)
- ORLJ 4002 Functions of organizations (3)
- ORLJ 5002 Advanced functions of organizations (3)
- ORLA 5025 Ecology of data-driven leadership (3)
- ORLA 5541 Federal politics, federal policies, and administrators (3)

Adult Learning (minimum of 3 points):

- ORLD 4053 Facilitating adult learning (3)

Human Resource Development
(minimum of 3 points):

- ORLD 5055 Staff development and training (3)
- ORLD 5062 Human resource develop-
ment in organizations (3)
- ORLJ 5003 Human resource manage-
- ORLJ $5310 \quad$ Preparation for coaching (3)

Group Dynamics (minimum of 3 points):

- ORLD 5822 Building productive relationships with social intelligence (3)
- ORL 5362 Group dynamics: A systems perspective (3)
- ORLJ 5017 Small group intervention: Theory and method (3)

Organizational Behavior (minimum of 3 points):

- ORLJ 4005 Organizational psychology (3) (Note: This is a prerequisite for many ORLJ courses)
- ORLJ 5045 Organizational dynamics
- ORLJ 5106 Psychological aspects of organizations (3)
- ORLD 5822 Building productive relationship with social intelligence (SQ) (3)

Technology (minimum of 3 points):

- MSTU 4020 Social and communicative aspects of the internet (3)
- MSTU 4022 Telecommunications and distance learning (3)
- MSTU 4083 Instructional design of educational technology (3)
- A\&HF 4089 Aesthetics of technology (3)


## Required Core Research Sequence

 (3-18 points)M.A. (minimum 3 points):

- ORL 5521 Introduction to research
- ORL 4009 methods in education (3) or
- ORLJ 4009 Understanding behavioral research (3)

Ed.M. (minimum 6 points):
In addition to one of the above listed courses, Ed.M. students must take a statistics course from those listed below.

Ed.D. (minimum 18 points):
At the Ed.D. level, coursework must include a research design course, a data collection course (either qualitative or quantitative), a data analysis course (either qualitative or quantitative), and a dissertation seminar. These courses include, but are not limited to, those listed below. Ed.D. candidates must take ORLD 7500 (1 point) in the semester in which they defend
their proposals. Ed.D. candidates must also enroll in ORLD 8900 (or 3 point Teachers College course) during fall and spring semester, after passing the certification examination.

- HUDM $4120 \quad$ Basic concepts in statistics (3)
- HUDM 4122 Probability and statistical
- ORID 4800 inference (3)
- ORLD 4800 Workshop: Critical literature
- ORLD $5550 \quad$ Research on organizational
learning (3)
- ORL 6500 Qualitative research methods in organizations: Design and data collection (3)
- ORL 6501
- ORLD 7500 Dissertation seminar in adult education (1)
- ORLD 7900 Directed dissertation research (3)


## Contextual Concentration Specific

Course Requirements (15-18 points)
Adult Development Theory and Applications (minimum of 3 points):

- ORLD 4051 How adults learn (3)
- ORLD 5823 Building 21st century organizational capability with cultural intelligence (3)
- HUDF 4028 Sociology of the life course (3)
- HUDK 5023 Cognitive development (3)
- HUDK 5027 Moral development (3)
- HUDK 5125 Cross-cultural developmental
- ORIH 5525 psychology (3)
- ORLH 5525 Advanced professional seminar: College student development theories (3)

Adult Learning Theory and Applications (minimum of 3 points):

- ORLD 4050 Introduction to adult and continuing education (3)
- ORLD 4815 Developing critical thinkers (1)
- ORLD 4827 Fostering transformative learning (2-3)
- ORLD 4828 Imagination, authenticity, and individuation in transformative learning (2-3)
- ORLD 4850 Discussion as a way of teaching (1)
- ORLD 5057 Adult learning and education: Theory and practice (3)
- ORLD 5815 Critical theory and adult learning (1)

Systems Learning Theory and Applications (minimum of 3 points):

- ORLD 5061 The learning organization (3)
- ORLD 5550 Research on organizational
- ORLA 4049 Creating learning communities (3)

Program Development and Management (minimum of 3 points):

- ORLD 4052 Program development: Assessing learning needs and evaluating outcomes (3)
- ORLD 5053 Developing and managing adult learning programs (3)

Conflict Resolution (minimum of 3 points):

- ORLJ 5148 Managing conflict in
- ORLJ 5340 Basic practicum in conflict Basic practicum in conflict
resolution (3) Fundamentals of cooperation, conflict resolution, and mediation in different institutional contexts (3)
- ORLJ 6350 Advanced practicum in conflict resolution (3)


## Elective Courses

Electives include, but may not be limited to, courses in conflict resolution, policy and evaluation, technology for learning, and management/information systems. These are tailored to the student's career goals and can be taken in the Department or elsewhere in Teachers College or Columbia University. Electives can include transfer courses. Students are required to take a minimum of three breadth courses at Teachers College ( $2-3$ points each totaling at least 6 points) outside of our immediate program area to satisfy the Teachers College breadth requirement.

A culminating integrative project for the M.A. is required. For the Ed.M., the culminating project must be a research study. For the Ed.D., a dissertation is required. Guidelines for the integrative project are available in the program office located in Room 201 Zankel Building. Students should meet with their advisor the semester before they plan on graduating, to review the guidelines. Students in the Ed.D. program are required to pass a certification examination and to write a qualifying paper and successfully defend a dissertation. Details of the program are available in CD and hard copy format as an advisement guide.

## ADULT EDUCATION GUIDED INTENSIVE STUDY (AEGIS)

Program Coordinator:
Professor Lyle Yorks
Program Office: (212) 678-3760
Email: ly84@columbia.edu
Website: www.tc.edu/o\&1/AdultEd

## Degree Offered:

ADULT EDUCATION GUIDED INTENSIVE STUDY (AEGS)

Doctor of Education (Ed.D.)

## Program Description:

AEGIS is a highly selective, fast-track cohort program leading to the Ed.D. in Adult Education Guided Intensive Study for mid-career professionals who work full time, and who choose to pursue a doctorate in a concentrated format. The program emphasizes leadership for adult and organizational learning. Scholar practitioners are helped to examine and critique theory and professional experience. The program is designed for experienced, self-directed professionals capable of completing a rigorous program emphasizing guided independent study. Coursework is completed over a two-year period. A new cohort begins in June of odd years (i.e., 2011, 2013). Participants attend a concentrated three-week session at Teachers College in each of three summers. During the academic year, they meet for Friday evening and Saturday seminars four times each semester for a total of four semesters. Due to state requirements attendance in all class sessions is mandatory. Absence will result in having to withdraw from the AEGIS program ("step out") with some possibility of reenrolling with a subsequent cohort (at the same stage of progress through the sequence). Should a student step out of the program, tuition refund, if any, will be handled on a case by case basis. Courses are not open to students from other programs. Special tuition: Currently $\$ 9,427.00$ per semester. Tuition is subject to change.

## Special Application

## Requirements/Information:

- An application essay, not exceeding ten double-spaced pages, that addresses the following:

For centuries Western philosophical thought has considered the uniqueness of human beings and how they differ from other species that inhabit the earth and the special responsibility this uniqueness entails. Thomas Aquinas, building on the work of Aristotle,
tells us that "the ultimate intrinsic end of man is the perfection of his highest and specific faculty, namely his intellect." John Donne, when confronted with his own imminent death, tells us that "no man is an island entire of itself; every man is a piece of the continent, a part of the main...any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls, it tolls for thee."

In your view what assumptions underlie each of these statements? In what ways are these statements contradictory or complementary? What do these statements tell us about individual and societal responsibility for leadership and learning? What dilemmas, if any, do they suggest for the role of education in society? How should adult educators address these implications? What assumptions are you making about your role as an adult educator in your remarks?

- Academic writing sample. Refer to the special requirements for the Adult Learning and Leadership Program for guidelines on the academic writing sample.
- A personal statement that documents experience in leading, designing, or teaching in programs that serve adult learning in a variety of settings: institutions of education, corporations, healthcare, non-profit and public organizations, or religious and community education initiatives. The personal statement should also identify career/life goals and describe why a degree in this field is a good fit with these goals.
- A professional resumé indicating several years of experience in program development or administration of adult education, counseling, staff development, or training.
- If the application materials are acceptable, applicants will be invited to campus for an interview and will be asked to complete a second on-site writing assignment at that time.
- Early admission decisions are made in December of the year preceding the beginning of the program. Applicants who want to be considered for an early admission decision should make sure that their materials are submitted by September 15 of the year preceding the beginning of the program and will be interviewed in October 15. Applicants submitting materials by January 15 of the year in which the program begins, will be interviewed in February. The admission deadline is January 15. Final admissions decisions are normally made by March of the year in which the program begins.


## Degree Requirements:

AEGIS students must complete 39 transferable semester credits from a previous successful graduate study at an accredited institution prior to beginning the program. AEGIS students fulfill the remaining 51 course points at Teachers College in a structured program that provides required courses in three areas: theory, research, and the study of professional practice in various settings where adults learn. For the final phase of the program, students must pass a certification examination, write a qualifying paper, and complete a dissertation.

## First Year: (22 points)

Summer (Three week session)
\(\left.$$
\begin{array}{ll}\text { - ORLD 6800 } & \begin{array}{l}\text { Workshop in adult education: } \\
\text { Life history (2) }\end{array} \\
\text { - ORLD 6902 } & \begin{array}{l}\text { Pro-seminar in adult } \\
\text { education (3) }\end{array} \\
\text { - ORLD 6918 } & \text { Introduction to research (3) } \\
\text { Fall } & \\
\text { - ORLD 6908 } & \begin{array}{l}\text { Adult education/learning: } \\
\text { Theory and practice (3) }\end{array} \\
\text { - ORLD 6800 } & \begin{array}{l}\text { Workshop in adult education: } \\
\text { - ORLD 6918 }\end{array}
$$ <br>
Literacy/ABE (1) <br>

Advanced research (3)\end{array}\right\}\)| Spring |  |
| :--- | :--- |
| - ORLD 6800 | Workshop in adult education: <br> - ORLD 6903 |
| Learning society (1) |  |
| Qualitative research (3) |  |
| - ORLD 6906 | Program development (3) |

Second Year: (26 points)
Summer (Three week session)

| - ORLD 6908 | Advanced seminar: Leadership <br> in adult education (3) |
| :--- | :--- |
| - ORLD 6908 | Adult development (3) |
| - ORLJ 5340 | Basic practicum in conflict <br> resolution (3) |

## Fall

- HUD 4120 Methods of empirical research
- ORLD 6914 Learning communities I

ORLD 618 (Face-to-face) (2)

- ORLD 6918 Advanced research (3)

Spring

- ORLD 6800 Workshop in adult education: Technology in organizations (1)
- ORLD 6908 Workshop and organizational
- ORLD 6915 Learning communities II
- ORLD 6918 Advanced research (3)


## Third Year: (3 points)

Summer (Three week session)

- ORLD 6800 Workshop in adult education: Capstone (1)
- ORLD 6916 Learning communities III (Face-to-face) (2)

AEGIS course offerings vary from cohort to cohort. Please contact the program office for current course information.

## COURSES:

ORLD 4050. Introduction to adult and continuing education (3)
Faculty. An introduction to the professional field of adult and continuing education: fields of practice (higher education, workplace, management training, social action, literacy and the like, and their evolution, and new challenges); schools of thought- pragmatism, radicalism and humanism- their transformation and their relevance; clarification of concepts; and discussion of emerging issues and challenges.

ORLD 4051. How adults learn (3)
Dr. Langer and Dr. Gonzalez. Role and perspective changes in adulthood, concepts of maturity, learning theories, personality development, cognitive learning and thinking, creativity, interests and attitudes, motivation, selfconcept, and achieving styles. Implications for the education of adults in a wide variety of workplace, community, and educational settings.

ORLD 4052. Program development: Assessing learning needs and evaluating outcomes (3)
Faculty. In-depth consideration of issues, strategies and tools for ensuring that the right needs are identified within organizations, that resulting learning programs address learning needs, and that program development provides adequately for evaluation of learning on multiple levels. Course addresses both theory and practical examples of implementation.

ORLD 4053. Facilitating adult learning (3)
Dr. Bitterman or staff. In-depth consideration of issues, strategies, and methods for facilitating adult learning. Theory is considered in relationship to practice. Methods are identified that are suited to adult learning in different settings, and to the role played by groups in individual to team learning. No prerequisites required, but learning is enhanced when taken following ORLD 4051.

## ORLD 4054. Adult literacy: Critiquing

 theory and practice (3)Dr. Bitterman. Permission required. Explores the complex issues surrounding adult literacy from the educator's perspective. Through a critical reading of representative literature and an in-field project, insight into contextual approaches to literacy and the myths surrounding illiteracy may be gleaned.

ORLD 4500. Special topics in adult education (1-3)
Faculty. Periodic explorations of special topics and issues in fields of higher education administration, student personnel administration, adult and workplace education, and college teaching and academic leadership.

ORLD 4815. Developing critical thinkers (1)
Dr. Brookfield. This workshop will explore answers to questions concerning facilitating adult learning. Presentations from the workshop leader will be interspersed with small group exercises focusing on different approaches to helping adults learn. Participants will be encouraged to explore their own experiences as learners and facilitators and to consider how these experiences might help them to reframe their practice.

## ORLD 4827. Fostering transformative

 learning (2-3)Dr. Cranton. In this course, we will explore how adult learners transform their habits of mind through critical self-reflection and discourse. We will also examine the relationships between individuation, authenticity, and transformation. We will focus on practical and innovative strategies for fostering transformative learning in adult education settings. This is a distance learning course.

ORLD 4828. Imagination, authenticity and individuation in transformative learning (2-3)
Dr. Cranton. Participants in this course will engage in an in-depth exploration of transformative learning with an emphasis on the role of affect and imagination in the learning process. The rational, cognitive approach will be reviewed for those participants unfamiliar with the traditional theory. We will investigate how the journey of becoming authentic is a transformative process. Jung's concept of individuationdifferentiating one's Self from the collectivewill be used as yet another lens through which we can view transformation.

ORLD 4844. Helping adults learn (1-3)
Dr. Brookfield. In this course, participants will explore the ways in which adults learn critical thinking and they will experience different techniques to teach critical thinking. Exercises to be reviewed will include: Scenario analysis, heroes and villains, crisis decision simulation and critical incidents. The course will mix presentations by the leader with small group exercises.

ORLD 4850. Discussion as a way of teaching (1)
Dr. Brookfield. Discussion is one of the most frequently used teaching methodologies in higher and adult education today. This 2-day workshop explores the rationale for the use of discussion, examines some of the most frequently used discussion approaches, and investigates the use of discussion in specific teaching contexts. It is based on Stephen Brookfield (the workshop leader) and Stephen Preskill's book Discussion as a Way of Teaching, a 1999 Educational Studies Association Critics' Choice.

ORLD 4900. Research and independent study in adult education (1-8)
Faculty. Permission required.

ORLD 5023. Leadership and self-development: A biographical approach (2-3) Dr. Alhadeff-Jones. This course takes an indepth look at leadership and self-development using a biographical approach. Writing one's own life history and interpreting other students narrative brings participants to go directly to the heart of all significant leadership transformation: growing as a person to grow as a leader. Multidisciplinary readings are also privileged in order to explore leadership as a complex phenomenon.

ORLD 5053. Developing and managing adult learning programs (3)
Dr. Volpe. Organization studied in relation to community structure and social forces. Finance and facilities, personnel, program, and community relations. Major emphasis on case analysis.

ORLD 5054. Strategy development as a learning process in organizations (3) Professor Yorks. This course provides a comprehensive view of organizational strategy from a learning perspective. Students examine various models for facilitating the development of strategic initiatives through learning interventions.

## ORLD 5055. Staff development

 and training (3)Drs. Chartrand and Parker. Introductory course covering the organization, management, and instructional process involved in staff training and development programs in business, industry, unions, healthcare institutions, government, and other noncollegiate settings. Current developments, innovative practices, and issues. This course is also offered in a distance learning format.

## ORLD 5056. Adult education social

action (3)
Faculty. A historical, sociocultural and psychopolitical approach to adult learning and education. Contexts of adult education for social change in the North (social movements, community development) and the South (NGOs, community education); concepts of conscientiation, social action, praxis, and empowerment are covered as well as new challenges to social change education (globalization, liberation, post-modernism).

ORLD 5057. Adult learning and education: Theory and practice (3)
Professor Marsick. Prerequisite: ORLD 4050, ORLD 4051, or ORLD 4053. Advanced seminar in theory development through a synthesis of the writings of selected philosophers, social scientists, and educators. History and transformation of adult education philosophy and theory; cultural, social and political contexts of theory-building; critical analysis of the main schools of thought; discussion of new challenges to adult learning and education theory (social learning, organizational learning).

ORLD 5061. The learning organization (3)
Dr. Maltbia and Professor Marsick. This course describes theory and practice in creating learning organizations. In-depth attention is given to action science as a framework for organizational learning. Readings and case studies provide insight into learning at individual, group, and organizational levels. ORLD 5055 or its equivalent is a prerequisite. Education Leadership Ed.D. students are exempt from the prerequisite.

ORLD 5062. Human resource development in organizations (3)
Professor Yorks. A comprehensive view of the field of human resource development. The emphasis is on how HRD relates to a changing workplace and how emerging theories of strategic and performance management relate to the learning and development needs of people and organizations. Prerequisite: ORLD 5055 or ORLJ 5003 (Organizational Psychology students), or instructor permission.

ORLD 5065. The learning society (3)
Dr. van der Veen. This course introduces students to ways in which people learn through daily participation in society. Students examine how society and social institutions learn in a "learning society," and how educational support for this needs to change. Prerequisite: ORLD 4050.

ORLD 5301. Practicum in group facilitation in healthcare settings I
Faculty. This course is Part One of a threecourse series focused on professional group supervision and on critical reflection on the theory, practice and integration of professional group supervision. The practicum series integrates theories of adult education, spirituality, personality, and therapeutic supervision in palliative and health care settings. This first course focuses on the person as educator within the supervisory relationship: exploring professional identity, reviewing group facilitation standards, and providing an overview of supervision. Students need to be engaged in a practicum, which can be arranged by themselves, by agencies with which they are associated, or through internships linked to the course.

ORLD 5302. Practicum in group facilitation in healthcare settings II
Faculty. This course is Part Two of a threecourse series. Helps students to apply their learning to observe, critique, and deepen their supervisory work, with a particular focus on the educator's assessment of supervisees and group function. Students need to be engaged in a practicum, which can be arranged by themselves, by agencies with which they are associated, or through internships linked to the course.

ORLD 5303. Practicum in group facilitation in healthcare settings III
Faculty. This course is Part Three of a three-
course series. Focuses on intervention and curriculum development vis-a-vis supervision, adult education program design, and, behavioral sciences, and cultural competence. Students need to be engaged in a practicum, which can be arranged by themselves, by agencies with which they are associated, or through internships linked to the course.

ORLD 5550. Research on organizational learning (3-4)
Professor Gephart. Students will read and discuss theory and research on organizational learning for knowledge/expertise creation and sharing; and review, design, or conduct research in schools, businesses, or not-forprofit organizations.

## ORLD 5815. Critical theory and adult learning (1)

Dr. Brookfield. In this workshop, participants examine major figures in the critical theory tradition. The implications of the ideas of notable individuals such as Marcuse, Fromm and Foucault are considered as they relate to adult learning and the practice of adult education.

ORLD 5819. Workplace Learning Institute (1-3)
Faculty. The Workplace Learning Institute brings together public and private sector training and human resource practitioners, managers, program directors, faculty and students interested in exploring current issues that define the scope and nature of workplace learning. Themes vary each time it is offered.

ORLD 5821. Leveraging emotional intelligence (EQ) to enhance organizational effectiveness (3)
Dr. Maltbia. The Workplace Learning Institute. Leveraging Emotional Intelligence (EQ) to Enhance Organizational Effectiveness will explore research, best practices, future directions, learn to select among popular EQ assessment and measurement tools, distinguish between cognitive learning and emotional learning strategies, effectively position the "business case" for EQ and evaluate the effectiveness of EQ learning strategies. Participants will receive personal profiles based on three popular EQ assessments and applied insights to leadership development strategies including executive coaching.

ORLD 5822. Building productive relationship with social intelligence (SQ) (3) Dr. Maltbia. The Workplace Learning Institute. Building Productive Relationships with Social Intelligence (SQ) describes the components of the emerging emotional economy and why its important to organizational performance, expand EQ capability by amplifying social intelligent components, examine the social neuroscience behind the dynamics of productive relationships, combine non-verbal agility to expand empathic accuracy for improved communication, and develop foun-
dational human interaction skills to enhance relationships. Participants will examine the results of 2 assessments: (1) NBI (Thinking Style) and (2) Team Roles Inventory with a focus on devising small group and team development interventions.

ORLD 5823. Building 21st century organizational capability with cultural intelligence (3)
Dr. Maltbia. The Workplace Learning Institute. Building 21st Century Organizational Capability with Cultural Intelligence (CQ) students will learn a strategic learning and leadership framework used to guide cultural diversity interventions in organizations, examine the theoretical and philosophical foundations associated with evidence-based cultural diversity strategies, explore a set of core practices informed by important leadership questions, experiment with sample tools designed to launch strategic cultural diversity processes, apply strategic diversity learning and change process to personal project to integrate key learning. Participants will examine how three assessments (i.e., Culture in the Workplace Questionnaire, CQ Assessment, and Bennett's Intercultural Development Inventory) can be used to inform the design and implementation of various learning strategies focused on building a leveraging diversity capacity in the workplace.

ORLD 5900. Research in adult education (1-6)
Faculty. Permission required. Conduct research studies (not a part of a doctoral dissertation) under guidance. Focus on a particular institution or type of institution, e.g., college of liberal arts, professional school, community college.

ORLD 5900-ORLD 6900 Research in adult education (for Columbia coaching certification program) (4 each)
Dr. Maltbia. Permission of Instructor required. Certain sections of ORLD 5900 and ORLD 6900 are designed to enable students to participate, for credit, in the Executive Coaching Introductory and Advanced Coaching Intensives conducted in partnership with Columbia University, Business School. ORLD 5900 is used to take the Introductory Intensive for credit. ORLD 6900 is used to take the Advanced Coaching Intensive for credit.

ORLD 6550-ORLD 6551. Advanced seminar in adult education (1-3) Faculty. Intensive study of a selected topic. Topic varies from term to term and is typically related to an ongoing program or research project. Students may begin either term.

ORLD 6557-6558. Research practices in adult education (1-3)
Faculty.
ORLD 6900. Research and independent study in adult education (1-6) Faculty. Permission required.

ORLD 7500. Dissertation seminar in adult education (1)
Faculty. Permission required. Students should have completed most or all coursework (including research methods courses) and have passed the certification examination. The course is intended for students who have identified a reasonably narrow area for research and have already completed a preliminary literature review. The course will assist the student in design, methods, and other matters of concern in the preparation of an acceptable dissertation proposal.

## ORLD 7900. Directed dissertation

 research (3)Faculty. Permission required. All doctoral students eligible for this course must register each semester until a proposal hearing has occurred and a proposal has been approved.

ORLD 8900. Dissertation advisement in adult education (0)
Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.


## Education <br> Leadership

*Please note: As of September 1, 2011, the policy programs in Education Leadership, will be found in the new Department Education Policy and Social Analysis.

The Education Leadership area of study includes courses of study in leadership education and development for students pursuing professional careers in public and private education, and research-oriented courses of study in leadership and policy for students pursuing careers as academics, policy analysts, and researchers.

## EDUCATION LEADERSHIP

## Program Coordinator: <br> Professor Craig Richards

Program Office: (212) 678-3420
Email: tcedleadership@tc.columbia.edu Website: www.tc.edu/o\&l/ed-leadership/

## Program Description:

With a nationally recognized faculty and a tradition of prominence, the Teachers College Education Leadership Program prepares students for careers as practitioners and scholars to lead and transform a wide variety of educating organizations. Students are equipped to lead educational practice; to influence political systems, education law, and education policy; to apply the methods of social science research to the conduct of inquiry; and to seek equality, equity, and diversity in education. Graduates serve in leadership positions as school principals and headmasters, district superintendents, and education leaders in comparable positions of executive leadership; as policy analysts and advocates; and as scholars of education and education leadership.

To prepare themselves to serve effectively, students:

- Become thoroughly grounded in the theory and practice of education leadership;
- Develop a broad and deep understanding of educating institutions in our society;
- Understand teaching and learning and are able to lead and support effective teaching and learning for all kinds of teachers and students;
- Understand the principles of organizational culture and behavior and possess skills needed to provide effective organizational leadership;
- Understand contemporary management systems, and are able to employ them effectively;
- Understand the nature of policy, political systems, and law and possess the skills required to shape and influence these systems and their products;
- Understand the uses of technology in education and administration, and possess the skills and knowledge to use technology effectively;
- Understand the nature of social science research and are able to apply its principles and methods in conducting inquiry and reviewing research;
- Are alert to the legal and ethical considerations that influence all aspects of education;
- Are committed to the ideals of equity and diversity in educational matters, and possess the skills and knowledge needed to promote these ideals in educational institutions; and
- Exhibit the courage and critical intelligence needed to question what is and develop what might be.


## Special Application <br> Requirements/Information:

Special application requirements include:

- Graduate Record Examination (GRE) is required for the Ph.D. program in Education Leadership, as well as for the Urban Education Leaders Program. For the latter, we recommend scores of 4.0 or higher on the writing. The Private School Leadership master's programs offered through the Klingenstein Center require either GRE or Miller Analogies Test (MAT) scores. Finally, the GRE is not required for the Summer Principals Academy (SPA).
- Applicants to the Ed.M. and Ed.D. in Education Leadership with a course of study in Public School Building and Public School District Leadership should have at least three (3) years of teaching and/or administrative experience in the public schools (K-12).
- Applicants to the Ed.M. program in Education Leadership with a course of study in Private School Leadership should have at least three (3) years of full-time teaching experience.

Only Ph.D. and Ed.D. applications that are complete and have been received by the Admissions Office by the early deadline as advertised by the College will be considered.

All master's applications (Ed.M.) in Public School Building Leadership and Public School District Leadership; Private School Leadership; or M.A. in Private School Leadership that are complete and have been received by the Admissions Office by the early deadline as advertised by the College will be considered for both admission and any available scholarship aid. All complete applications received by the final deadline for the master's program will be
considered for admission only. Please see the Admissions section of this bulletin for more information.

The Education Leadership area of study offers the following courses of study:

## PUBLIC SCHOOL AND SCHOOL DISTRICT LEADERSHIP

(Application code: ELBL for M.A. and Ed.M.; ELUE for Urban Education Leaders)

- The Public School Summer Principals Academy (ELBL) (M.A., Ed.M.- Summer cohort program)
- School-Year Master's (ELBL) (Ed.M.- for aspiring school-level leaders) (not accepting applications for 2011-2012)
- Urban Education Leaders Program (ELUE) (Ed.D.- Summer/school-year cohort program) of odd-numbered years


## PRIVATE SCHOOL LEADERSHIP

For independent, international and religiously affiliated schools.
(Application code: ELPR) M.A., Ed.M.

- Full-Year Master's (M.A., Ed.M.- full-time study and fieldwork- from September to May)
- Two Summers Master's (M.A., Ed.M.Cohort program over 18 months)

Ph.D. IN EDUCATION LEADERSHIP* (Application code: ELSR) Ph.D.

- School-Year Doctoral (Ph.D.) with concentrations in Leadership, Policy \& Politics (LPP), Leadership \& Adult Development (LAD), and Leadership \& Organizational Development (LOD)
*Not accepting applications in 2011


## EDUCATION LEADERSHIP STUDIES*

## (Application code: ESLD) M.A./Ed.M.

- The program is currently under curriculum revision.



## COURSE OF STUDY IN PUBLIC SCHOOL AND SCHOOL DISTRICT LEADERSHIP

The Public School and School District Leadership course of study prepares students for positions of leadership within the public schools, such as principal, director, assistant superintendent, and superintendent of schools. The Ed.D. leads to New York State School District Leader certification. Students completing the Ed.D., however, can satisfy School Building Leader requirements as they work towards School District Leader certification.

The chief objectives of this course of study are to:

- Develop students' ability to lead educating institutions as purposeful, effective, humane organizations;
- Stimulate inquiry into problems encountered in professional practice;
- Broaden and deepen reflection about values, trends, and issues that affect the education enterprise;
- Provide skills and knowledge needed for the effective leadership and management of complex organizations in a sophisticated technological society; and
- Create and sustain a learning community committed to continuous learning and mutual support.

The curriculum spans the domains of leading learning, organizational management, policy and politics. Students complete intensive internships and conduct research, usually in field settings of the student's choice. Instructionally, the concentration offers innovative case-based, problembased, and field-based learning experiences. Offerings reflect both the National Policy Board for Educational Administration's National Council for Accreditation of Teacher Education/ Educational Leadership Constituent Council (NCATE/ELCC) and New York State Education Department standards for effective leadership preparation and the Education Leadership Program's assumptions about the characteristics of effective leadership: The centrality of education and education leadership in promoting social justice and diversity; the need to nurture teaching and learning among all members of the school community; the importance of collaboration and team work; the importance of personal transformation and leadership modeling; the use of reflective practice; and the need for innovation in creating a school vision and promoting educational change.

The course of study in Public School Building Leadership and Public School
District Leadership offers three concentrations:

- The Public School Summer Principals Academy
M.A., Ed.M.- Summer cohort program
- Urban Education Leaders Program Ed.D.- Summer/school-year cohort program
- School-Year Master's- Leadership Ed.M.- for aspiring school-level leaders (not accepting applications for 2011-2012)

THE PUBLIC SCHOOL SUMMER PRINCIPALS ACADEMY

Director: Professor Craig Richards
Assistant Director: Nicole Limperopulos
Program Office: (212) 678-3727
Email: Limperopulos@tc.edu
Website: www.tc.edu/summerprincipal
(Application code: ELBL)
M.A., Ed.M.- Summer cohort program

The Public School Summer Principals Academy (SPA) is structured for a diverse group of talented educators whose obligations preclude them from attending courses during the traditional fifteen-week semester or for whom distance is a barrier to attendance. The cohort program allows students to balance fulltime employment with graduate study. Aspiring school leaders pursue coursework and skill development over two summers and undertake 450 hour internships at their schools of employment during the intervening year. The summer academic schedule is Monday-Friday, 8:00 am - 5:00 pm for five weeks. The program is 36 points, is completed in two consecutive summers, and leads to an M.A. or Ed.M. and School Building Leader certification in New York State (New York has reciprocity with most states.) Housing is available for those who require it.

SPA integrates practice and skill development with theory and research using case studies and simulations and teamwork. Aspiring school leaders are encouraged to construct transforming possibilities for student learning, school improvement, social equity, and opportunity. We foster leadership development through an integrated set of experiences that include sound theoretical and "best practice" knowledge, problem-based coursework, and fieldbased experiences, including an intensive and extended internship. The following seven statements represent the core values of the Public School Summer Principals Academy:

- Quality education and education leadership are central to promoting social justice and
diversity and these values are central to ethical leadership;
- Excellent leadership development and preparation will nurture not only knowledge, skills, and values but also personal self-actualization and transformation;
- School leaders are responsible for nurturing not only the teaching and learning of all members of the school community but also for nurturing their own self-actualization and personal transformation;
- Skillful collaboration and team work are essential to foster quality schools;
- All aspects of leadership development and education will promote the practice of intellectually and ethically reflective leadership;
- Active, participatory learning that is rooted in actual school contexts, simulations, and case studies and that offers multiple opportunities to improve leadership skills is core to the curriculum; and
- Innovation and risk-taking play a key role in creating a vision and promoting educational change.

The knowledge, skills, and dispositions we seek to develop in the cohorts of students selected for SPA reflect and sustain these core competencies. They are also substantially present in the guidelines developed by ELCC and New York State for the certification of school building leaders. However, we seek to exceed the competencies of "good principals" and develop the intellectual, moral, and practical foundations that will permit principals of excellence to emerge. Excellent principals are developed over many years in the cauldron of reflective school leadership. The best academic programs support such emergence by providing a rich, complex, and adaptive learning environment that mimics closely the actual competencies required and provides frequent and prompt feedback.

The Public School Summer Principals Academy provides exactly that kind of environment promoting respect for and encouragement of cohort participants as they seek to become the best leaders they can be. The cohort model offers two intensive summers of study: summer immersion experiences for aspiring public school principals, as well as continuous support for students through an ongoing leadership seminar that continues throughout the academic program. The schedule supports the reality of aspiring principals who are currently working teachers, team leaders, department chairs, or supervisors who cannot afford to leave their schools or programs to attend graduate school full-time. The summer academic schedule is Monday-Friday, 8:00 am - 5:00 pm for five weeks. Students also learn through non-traditional venues including distance learning, action research, site-based experiential learning, and written exchanges
with faculty via student portfolios. E-portfolios are a central component of each student's experience in the program. Copies of student work, exemplars from projects and case analyses, the internship, personal and professional vision statements, and other documents are on-going representations of student accomplishment. The academic program is concluded with a group project. The New School Design Project is the culmination of academic preparation for the Summer Principals Academy. These presentations showcase the efforts that our aspiring principals have made over the 14 months to integrate the knowledge and skills they have developed while preparing for leadership service in schools across the nation. They provide our graduating academy fellows with an opportunity to highlight their plans for what an ideal new school should look like in order to meet the unique challenges facing urban schools today. The event offers other educational community leaders the opportunity to share their insights and expertise regarding how to close achievement gaps effectively through the design of innovative and high-performing schools. Cohort members organize themselves into small groups based on similar interests and ideas and work throughout their second summer to design and present on the new school concept in their ideal world scenario.

## Curriculum:

## Summer I Session

ORLA 4001. Introduction to school leadership and decision making (3)

ORLA 5018. School leadership for adult development (3)

ORLA 5029. Staffing, mentoring, and supervising learning communities (3)

ORLJ 5340. Basic practicum in conflict resolution (3)

## Fall/Spring Session

ORLA 5532. Curriculum development: Teaching, learning, and assessment (3)

ORLA 6460. Internship in school leadership (6)

## Summer II Session

ORLA 4033. School law and ethics (3)
ORLA 5025. Ecology of data-driven leadership (3)

ORLA 4025. Resource allocation for student achievement (3)

ORLA 5017. Team building and organizational development (3)

# Ongoing through all terms of enrollment <br> ORLA 6020. Pro-seminar in school leadership (3) 

## URBAN EDUCATION LEADERS PROGRAM

Director: Dr. Brian K. Perkins
Program Office: (212) 678-3071
Email: bp58@columbia.edu
Website: http://uelp.tc.columbia.edu

## (Application code: ELUE) <br> Ed.D.- Summer and school-year cohort program

The Urban Education Leaders Program offers school administrators and other education professionals an opportunity to complete a rigorous doctoral program while continuing to serve in schools, school systems, and other educational contexts. The program is dedicated to preparing students for high-profile, high-need positions as leaders in education, especially in urban settings. The TC faculty help to develop students' knowledge and analytic skills. Through unique district-based internship programs, students have the opportunity to learn with and from the nation's top education leaders. Academic study and hands-on leadership development inform each other as students examine the most urgent and significant challenges facing education leaders today.

The objectives of the Urban Education Leaders Program are to:

- Strengthen our students' ability to lead educational organizations and systems that are purposeful, successful, and humane contexts for learning
- Help students develop skills and knowledge needed for the effective leadership and management of complex organizations in a global, technological, and culturally diverse society
- Stimulate inquiry and innovation around challenges in professional practice
- Broaden and deepen reflection about values, trends, and issues that affect the education enterprise
- Create and sustain a community of leaders committed to continuous learning and mutual support.

Students pursue a coherent curriculum grounded in practice and combining the best of theoretical and professional studies.

## Degree Requirements:

Students must earn 90 points of academic credit, complete a field experience requirement, pass a certification examination, and successfully defend a doctoral dissertation.

For additional program information please visit http://uelp.tc.columbia.edu.

## PRIVATE SCHOOL LEADERSHIP

Program Director:
Professor Pearl Rock Kane

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\begin{aligned}
& \text { Program Office: (212) 678-3156 } \\
& \text { Email: Klingenstein@tc.columbia.edu } \\
& \text { Website: www.klingenstein.org. }
\end{aligned}
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## PRIVATE SCHOOL LEADERSHIP <br> (Application code: ELPR) M.A., Ed.M.

This course of study prepares students to meet the challenges of leadership as school heads, principals, deans, department heads, and instructional leaders. The purpose is to increase knowledge and cultivate skills and attitudes necessary for effective administrative practice, including an understanding of the dynamics of organization change, effective teamwork, and reflective practice. The program features core courses specifically geared to meet the needs of private school leaders including school administration, law, instructional leadership, finance, and marketing. Students participate in guided fieldwork experiences and benefit from a connection to an extensive network of cooperating schools. Programs in Private School Leadership include:

- Full-Year Master's (M.A., Ed.M.)
- Two Summers Master's (M.A., Ed.M.)

Both the Full-Year Master's and the Two Summers Master's programs in Private School Leadership are supported by the Esther A. and Joseph Klingenstein Fund and the Education Leadership Program.

Full-Year Master's (M.A., Ed.M.)

## Master of Arts

The 32-point Master of Arts degree in Private School Leadership, consists of required core courses and elective course options. Students are required to complete a research project in collaboration with a small group of students and to participate in field work in New York City public and private schools. Independent school educators with three years of full-time teaching experience and a bachelor's degree from an accredited college or university are eligible to apply.

Please note: This course of study does not lead to state administrative certification as a public school principal or superintendent.

## Master of Education

The 60 -point Master of Education in Private School Leadership, consists of all requirements specified for the Master of Arts degree. In addition, students are required to complete a supervised administrative internship, a research project of the student's own design aimed at improving private school practice. Up to 30 relevant points from an accredited graduate program may be transferred.

## Two Summers Master's (M.A., Ed.M.)

Designed for teachers and administrators who have demonstrated strong educational leadership and who choose to stay at their jobs during the academic year, the Two Summers Master's Program offers the same degree options (M.A. and Ed.M. in Private School Leadership) as the full-year program. Rigorous study, collaborative projects, and practica in administration are hallmarks of the program. Unlike the Full-Year Master's, the Two Summers curriculum is entirely prescribed. Participants attend intensive six-week sessions in New York City for two consecutive summers and during the year continue their work by engaging in special projects for their schools of employment. The program of study is completed over eighteen months. Independent school educators with three years' full-time teaching and a bachelor's degree from an accredited college or university are eligible to apply.

Candidates are selected from among sitting administrators and aspiring school leaders in independent schools. Because there is considerable collaboration with the sponsoring school, Two Summers Master's students must be recommended as community members with strong leadership capability by their respective Heads of School. Sponsoring schools are asked to consider granting some release time to these students doing research and practica during the academic year. In some cases, schools also agree to help fund the student's degree program through grants or forgivable loans.

Successful completion of the eighteen-month program leads to a 32-point Master of Arts degree, or a 60 -point Master of Education degree for those who have already completed graduate work in a teaching discipline or another field of study relevant to school leadership. Up to 28 points of transfer credit may be accepted toward the Ed.M.

The Two Summers Master's Program couples intensive academic summer coursework with site-based requirements to offer candidates the opportunity to combine rigorous academic study with hands-on investigation and application. Each summer term is divided into two three-week
sessions. Coursework is enhanced by group projects, visiting speakers, and visits to area schools. The prescribed curriculum has been designed around five core principles of effective leadership:

- The centrality of education and education leadership in promoting social justice and diversity;
- The need to nurture teaching and learning among all constituents in the school community;
- The importance of collaboration and teamwork in accomplishing goals;
- The use of reflective practice in fostering continued learning;
- The practice of moral and ethical leadership as a way of life.

Site-based projects and practica are designed to provide the student with experiential learning in the context of his/her own school and to offer residual benefits to the sponsoring school. Effort is made to partner with schools on choosing research topics and creating meaningful practica in the academic year between summer sessions.

## Academic Requirement:

Research and Independent Study in Educational Administration. As part of the research course, students work in small groups to choose a topic of importance to them, to their schools, and to the independent school sector at large. They develop a plan for research to be carried out over the course of the upcoming academic year. Throughout the year, each student gathers data and communicates electronically with group members in collaboration with the professors of research. Findings are presented during the second summer of coursework with the accompanying paper to be shared with both the research professor, and sponsoring school.

## Practicum Requirement:

During the academic year, students pursue practica in administrative areas of their respective schools. Practica may include work in finance, development, college guidance, admissions, and/or marketing. Those holding senior administrative positions generally focus on a particular area of their current job in order to track their thinking, planning, action, and results in deliberate ways.

## Capstone Project:

During the fall semester following the second summer session, students undertake a final project to complete their requirements. This research and writing-based project requires students to demonstrate their understandings about education leadership.

## COURSE OF STUDY FOR THE PH.D. IN EDUCATION LEADERSHIP

(Application code: ELSR) Ph.D.
*Not accepting applications in 2011.
School-Year Doctoral (Ph.D.) with concentrations in Leadership and Adult Development (LAD) and Leadership $\mathcal{E}$ Organizational Development (LOD)
In the rapidly changing and increasingly complex world of education, a crucial need exists for better knowledge about how schools and school systems can be organized and led most effectively. We need to reach deeper understandings of how policies, politics and the law can advance the twin goals of excellence and equity, how schools and school systems can best acquire and use resources, how leaders can support teacher development and student achievement, and how education policymakers and leaders can make best use of information from student assessments, program evaluations, and analytical research. This knowledge should be based on thoughtful reasoning and solid evidence; it should be theoretical in scope but also have clear implications for education practice.

The Ph.D. degree within the Education Leadership Program responds to these knowledge demands by focusing on the scholarly study of education leadership and policy. This degree program provides the opportunity to develop expertise in many interconnected subject areas, as preparation for careers in academic research and teaching or in applied policy development and research. Graduates of the Ph.D. program are able to build new knowledge, teach new leaders and craft new policies.

- Leadership for Adult Development (LAD) led by Ellie Drago-Severson.
- Leadership and Organizational Development (LOD) - led by Craig Richards

Both tracks are aimed at preparing future university professors to conduct research and to teach leadership at the graduate school level. While students in both tracks will enroll in core (required) quantitative and qualitative research methods courses together, they will take methodological and substantive courses independently in order to best support their development as university scholars.

Both tracks in our Ph.D. program are for individuals who desire deep educational experiences, excellence in theory, research and teaching, and intensive mentoring and who are preparing to assume the responsibilities of the professorship at leading research universities. Through coursework, research, assistant
teaching, research assistantships, faculty mentoring, and close working relationships with faculty members and fellow graduate students, doctoral students are provided with advanced training in the theory, research methods, and applications of adult development and socialorganizational psychology. Thus, students gain critical knowledge and skills that encompass both research and teaching.

More information about the Leadership for Adult Development (LAD) track:

- The LAD track has an adult development focus, namely to support individual and group growth through the theoretical and research lenses of adult development and adult learning.
- Students in the LAD track will be expected to engage in research that is primarily qualitative in nature.
- A unique aspect of the LAD track is an intensive experience of understanding and learning how to support adult development and adult learning at the individual and group level, a deep understanding of what is needed to shape organizational contexts to support this, and an experience of learning from doing so to enhance your university practices.

More information about the Leadership and Organizational Development (LOD) track:

- The LOD track emphasizes a theoretical and research focus on the leadership of groups, institutions, and organizations from an organizational and social psychology perspective.
- Students in the LOD track will engage in research that is primarily quantitative (e.g., large scale data sets, survey research and developmental assessments exploring leadership in the context of groups, institutions and organizations).
- A unique aspect of the LOD track is a wide breadth of coverage including human resource management, organizational behavior, organizational change, leadership, conflict and negotiation, coaching, diversity, motivation, power and authority, group processes, and organizational dynamics.

Some unique aspects of the Education Leadership Ph.D. program overall include:

- The integration of adult development and social and organizational psychology
- A theoretical research and applied focus on understanding multiple levels of organizational functioning from individuals to groups to organizations as a whole, as well as the dynamic interaction among these levels
- An emphasis on both qualitative and quantitative research methods to address organizational and individual issues
- Opportunities to engage in basic research, applied research, and graduate level teaching
- Faculty trained in a broad array of disciplines including leadership theory and practice, adult development, social psychology, organizational behavior, and group dynamics
- Opportunities to present at national conferences and to co-author with faculty

In summary, our Ph.D. programs in both tracks are high-level research programs designed to prepare those who aspire to become university faculty (academics) to teach and conduct research in Education Leadership (preparing leaders) in universities. Our program is for individuals who are committed to a career as university faculty members who will prepare the next generation of educational leaders.

The program may be completed in 75 points, of which up to 30 acceptable credits may be transferred from another graduate institution. The program requires extensive preparation in quantitative and qualitative research methods and in one of the cognate social sciences offered by the University, for example, Political Science, Sociology, or Economics. Before applying to the Ph.D. program in Education Leadership, applicants are encouraged to consult with Program Manager Angela Carrasco at carrasco@tc.edu while Program Director Dr. Ellie Drago-Severson is on sabbatical.

## Curriculum

Required of all Education Leadership Ph.D. students:

- HUDM 4122 Probability and statistical inference
- ORLJ 5040 Research methods in social psychology
- ORL 6500 Qualitative research methods in organizations: Design and data collection

Required Research Core for LAD ( 12 credits total)
Advanced Qualitative Data Collection
Courses (choose at least one of the following)

- ORLH 6020 Craft of interview research
- ITSF 5000

Methods of inquiry: Ethnography and participant observation

Basic Data Analysis Course

- ORL 6501

Qualitative research methods in organizations: Data analysis and reporting

Orientation to Research (choose at least one of the following)

- BBSR 5582 Research design in the movement sciences
Course in survey research design


## Required Research Core for LOD (9 credits

 total)- HUDM 5122 Applied regression analysis
- HUDM 5123 Linear models and experi-
- HUDM 6122 Multivariate analysis I

Methodology Electives for LAD and LOD
Students are encouraged to take additional methodology courses including courses that do not help them with their dissertation research, to best prepare themselves for their future roles as researchers and faculty members. Some possible courses offered by Teachers College are listed below. Students using mixed methodology for their research must take additional methodology courses in quantitative/ qualitative methods.

- ITSF 5000 Methods of inquiry:
- HUDM 5059 Multidimensional scaling and
- HUDM 5124 Multivariate analysis I
- HUDM 6055 Latent structure analysis
- HUDM 6123 Multivariate analysis II
- ORL 6518 Methods of case study and
- ITSF 5001 Ethnography and participant observation: Fieldwork, analysis, reporting
- ITSF 5002 Ethnography and participant observation: Comparative and quantitative analysis
- ORL 5522 Evaluation methods I
- ORL 5523 Evaluation methods II Seminar
- EDPA 4002 Data analysis for policy and decision making I
- EDPA 5002 Data analysis for policy and decision making I I
- ORLA 5524 Instrument design and validation - Seminar
- ORL 5523 Evaluation methods II -
- EDPA $4002 \quad$ Seminar $\quad$ Data analysis for policy and
- EDPA $5002 \quad$ decision making I Data analysis for policy and
decision making I I - ORLA 5524 Instrument design and validation - Seminar


## Theory and Practice in Education Leadership ( 6 courses required)

Core Curriculum for LAD (18 Credits)

- ORLA 4044 Leadership for adult
- ORLD 5057 Adult learning and education: Theory and practice
- ORLD 5550 Research on organizational learning
Advanced course in adult developmental leadership One course from education policy; possible selections appear below:
- EDPS 4000 Education and public policy
- EDPE 4055 Resource allocation in
education
- EDPA 4046 School finance: Policy and practice
- EDPA 4048 Education policy analysis and implementation
- EDPE 4050 Economics of education
- EDPP 4040 American politics and education
- EDPP 5041 Politics of centralization and decentralization
- EDPP 5042 Urban politics and education

One additional course in adult development or adult learning; possible selections appear below:

- ORLD 4051 How adults learn
- ORLD 4053 Facilitating adult learning
- ORLD 4827 Fostering transformative
- ORLD 4828 Imagination, authenticity, and individuation in transformative learning
- ORLD 4844 Helping adults learn
- ORLD 5054 Strategy development as a learning process in organizations
- ORLD 5061 The learning organization
- ORL 5362 Group dynamics: A systems perspective
- ORLJ 5340 Basic practicum in conflict resolution

Core Curriculum for LOD (18 Credits)

- ORLJ 4002 Functions of organizations
- ORLJ 5045 Organizational dynamics \& theory
- ORL 5362 Group dynamics: A systems
- ORLJ 6040 Fundamentals of cooperation, conflict resolution, and mediation in different institutional contexts
- Two additional courses chosen in consultation with an advisor.


## Content Electives for LAD

Students will work with their advisors to choose an appropriate selection of additional courses that will provide them with the knowledge of theory and practice that they need to complete their research studies and prepare them for their future work. They should not feel limited to course offerings by the core faculty of the Education Leadership program, or even to those offered by Teachers College.
Sample electives appear below:

- ORLA 5055 School administration and cultural diversity
- ORLA 6018 Staff personnel administration
- ORL 5362 Group dynamics: A systems perspective
- ORLJ 5005 Leadership and supervision
- ORLJ 5047
- ORLJ 4010
- ORLJ 4002
- ORLJ 5045 Organizational dynamics and theory

Content Electives for LOD

- ORLJ 5005 Leadership and supervision
- ORLJ 5018 Using survey research in organizational consulting
- ORLJ 5019 Data-based interventions in organizations
- HUDK 5198 Psychology of instructional
- ORJ 5046 systems design
- ORLJ 5046 Intercultural communications in organizational contexts: Theory, issues, and practices
- ORLJ 5047 Development of the multicultural self
- ORLJ 4010 Executive coaching

General Electives for LAD and LOD
Courses in the Department of Education Policy and Social Analysis on the logic and design of research, including:

- EDPS 4030 Sociology of educational processes in formal organizations
- EDPA 4013 Education policy and the management of instruction

Note: Historically, the Ph.D. concentration in Leadership, Policy, and Politics (LPP) has been housed within the Education Leadership Program. The Department of Education Policy and Social Analysis (EPSA) is seeking approval for a new Education Policy Ph.D. program. During this transition period, Ph.D. policy students will enroll through LPP in the Education Leadership Program, and the faculty from EPSA will assume instructional, advisory, and administrative responsibility for LPP. Please go to the EPSA section of this catalog for more information. The contact faculty in EPSA are: Professor Luis Huerta at (212) 678-4199, lah2013@columbia.edu or Professor Douglas Ready at 212-678-3850, ready@exchange.tc.columbia.edu.

## M.A./ED.M. IN EDUCATION LEADERSHIP STUDIES

(Not accepting applications for 2011-2012)
Masters students in Education Leadership Studies typically are preparing (1) for education leadership positions that do not require state administrative certification, or (2) for leadership positions in organizations that work with public or private schools and colleges, nonprofit organizations, government agencies, edu-cation-related businesses, NGO's, foundations, and advocacy groups. While this program does prepare the graduate student in leadership and management, it does not confer certification as
a school or district leader in New York State. The program is currently under curriculum revision. Contact faculty member: Professor Craig E. Richards, Richards@tc.edu

## EDUCATION LEADERSHIP NON-DEGREE PROGRAMS

In addition to the degree programs previously described, the Education Leadership Program offers several professional development opportunities to both first-time students and to alumni interested in continuing their graduate education. These are listed below.

## Graduate Study in Liberal Arts:

Students wishing to augment their studies at Teachers College by deepening their knowledge in a particular academic discipline may pursue advanced graduate study at the Graduate School of Arts and Sciences at Columbia University over additional summers. Successful completion of 12 points of coursework, chosen with the guidance of an academic advisor, will result in the award of a Columbia University Certificate of Professional Achievement in the Liberal Arts.

## Klingenstein Summer Institute for Early Career Teachers

An intensive off-site residential summer institute is offered for two weeks beginning in midJune for independent elementary, middle, and high school teachers with two to five years of full time teaching experience as head teachers. The Institute is designed to increase classroom effectiveness and to prepare teachers who have demonstrated outstanding promise for leadership positions in private schools. Participation is based on an award that covers all expenses. Participants earn 4 graduate credits. Contact The Klingenstein Center at (212) 6783156 for more information.

## Klingenstein Heads of Schools Program

The Klingenstein Heads of Schools Program is a two-week program of intensive study for heads of independent schools which allows for interaction with professional peers. School heads are in residence at the College. They participate in symposia on issues confronting independent school leaders and attend colloquia on topics of interest including moral leadership, diversity, and organizational change. School heads also pursue independent study, investigating problems of particular relevance to their school situations. Fellowship awards are granted annually. Please send completed application packets to the Klingenstein Center by May 1st. Contact The Klingenstein Center at (212) 678-3156 for more information.

## COURSES:

Before selecting courses, students should consult: (1) the Degree Requirements of the College describing the requirements of each degree; (2) the requirements of the Education Leadership Program as described in the Program Study Guide at www.tc.edu/o\&l, and (3) their faculty advisors. Summer Principals Academy courses are described separately at the end of this list.

ORLA 4001. Introduction to school leadership and decision making (3)
Faculty. This course uses the literature on deci-sion-making theory in combination with intensive case-study analysis in groups to explore how decision-making styles and strategies affect problem-based decision-making in innovative public school settings.

ORLA 4002. Data analysis for policy and decision making I (3)
Professor Ready. This is an introductory course in quantitative research methods that focus on non-experimental designs and the analysis of large-scale longitudinal datasets, especially those related to education policy. Students become familiar with the logic of inferential statistics and the application of basic analytic techniques. No prior knowledge of statistics or quantitative methods is required.

ORLA 4010. Introduction to organization analysis in education (3)
Faculty. This course draws on concepts and propositions from organization theory to help students construct and analyze case studies of schools and school systems and develop action plans for organizational change, reform, and renewal. Special focus on theories of bureaucracy and community; organizational structure, culture, and politics; professional learning communities; and strategic learning organizations.

## ORLA 4025. Resource allocation for

 student achievement (3)Faculty. This course emphasizes the skills of school budgeting and facilities management, personnel allocations, and grant writing with a view to leveraging student achievement. Students use simulations and case studies to analyze an actual school budget; make a threeyear budget forecast; and reassign faculty, support staff, and instructional resources to improve performance.

## ORLA 4030. Ethical issues in education

 leadership (2-3)Faculty. An examination of ethical issues inherent in educational leadership, with an emphasis on ethical practice as well as theory. The ethics of rights, justice, and care applied to moral dilemmas arising from the professional literature, the humanities, and the student's own practice.

ORLA 4033. Ethical and legal issues in education leadership (3)
Professor Heubert. This course explores the nexus between law, ethics, and school leadership. It relies on both case law and the use of ethical dilemmas in the form of case studies and hypotheticals to teach prospective leaders how to consider, for themselves, the tensions they experience when the law, professional practice, and their ethical codes of conduct are in conflict.

ORLA 4042. The role of the state in education governance, policy, and practice (3) Faculty. The impact of state authority on local schools and school districts, seen through case studies of contemporary educational issues. Roles, relationships, trends, and the political context of policy making at the state level.

## ORLA 4044. Leadership for adult development (3)

Professor Drago-Severson. In this course we will explore an expanded notion of leadership that includes supporting adult development as a focal concern. Participants interested in organizational and individual leadership and growth, especially teachers, principals, superintendents, and other leaders, will study how constructive-developmental theory and pillar practices for supporting adult growth can enable leaders to support adults' transformational learning. Permission of the instructor is required.

ORLA 4045. Reconstructing schools in urban environments (3)
Faculty. Institutional and policy analysis of school redesign experiments in urban settings, with special emphasis on the Chicago case. Review of theoretical foundations research, political support, and implementation consequences of system-wide school reform, as well as analysis of how both experimental and sys-tem-wide change is initiated.

## ORLA 4046. School finance: Policy and

 practice (3)Professor Richards. Examination of the judicial and legislative involvement in school finance reform, taxation, and the equity and efficiency of local, state, and federal finance policies and systems.

ORLA 4047. Politics and public policy (3) Faculty. What are the relative roles of research and politics in determining public policy? One tradition considers public policy from the perspective of rational decision-making and considers research to be a source of objective enlightenment. A second tradition considers public policy as the outcome of battles among organized interests and portrays research as a weapon exploited by the powerful to further their own ends. This course addresses these and other issues as they relate to each of the stages in the policy process and as manifested in contemporary education policy debates such as that around school choice.

ORLA 4048. Education policy analysis and implementation (3)
Professor Huerta. Explores the issues of policy (or reform) implementation in schools and districts by focusing on the political reactions and organizational buffers to policy change and the ways that policies become adapted and changed to fit locally defined problems. Distinctions between implementation issues in bottom-up and top-down policy change are explored.

## ORLA 4049. Creating learning communities (3)

Professor Drago-Severson. How can education leaders and others create communities that support adult learning (i.e., changes in knowledge, skills, understanding, and/or behavior)? This course focuses on theories and research on adult learning and leadership practices. We will examine: (1) leadership in support of adult learning; (2) adult learning theories; (3) elements that shape adult learning communities (challenges and creative strategies); (4) practices that support adult learning; and (5) the importance of caring for one's own learning. Permission of the instructor is required.

ORLA 4050. Economics of education (3) Professor Levin. Teaches the basic economic concepts and methods to be used for further study and analysis of educational finance, education and inequality, education and economic growth, the impact of educational policies on educational outcomes, school reform, and school choice. (Also listed as ITSF 4050.)

ORLA 4058. Privatization and choice in education (3-4)
Professor Kane. Small public schools, independent schools, charter schools, vouchers, home schools, religious schools, and for-profit educational ventures are examples of the explosion of options in schooling available to a growing number of American families. The purpose of this course is to understand the configuration of these choices in America and the implications of those choices for a democratic society. Students consider whether school choice can serve the best interests of families and the common good. Through onsite visits, students use the diversity of schools in New York City as a laboratory for learning. Permission of the instructor is required.

ORLA 4060. Designing charter schools (3) Faculty. Design focus on instructional, governance, accountability systems, and organizational patterns. Reference to research on school models and on legislative and regulatory context of charter schools. Charter school leaders participate as resources. Collaborative field and electronic studies of existing charter schools.

ORLA 4070. The analysis of private schools (3)

Professor Kane. This course examines contemporary challenges for independent schools and
utilizes the talents of prominent leaders in the field to share their expertise. It focuses on practical applications of education research and theory with special emphasis on the implications for practice in independent schools.

## ORLA 4071. The leadership of private

 schools and non-profit organizations (3) Professor Kane. How can leaders transform "good" schools into excellent schools? The purpose of this course is to equip dynamic individuals with skills and knowledge for aligning schools to accomplish challenging goals. Students study how mission and vision, governance, teamwork, social intelligence, and organization behavior contribute to effective leadership practice. They assess barriers to school change and explore strategies to overcome them. They analyze culture and ways to develop the habit of continuous school improvement. The course uses a variety of approaches with a focus on case studies. Permission of the instructor is required.ORLA 4086. Law and education: Regulation, religion, free speech, and safety (3) Professors Heubert and Sigall. This survey course focuses on legal issues that arise in public and private schools. Topics include governmental regulation of public and private schools; church-state issues (prayer, vouchers, evolution); free-speech rights of students, teachers, and extracurricular groups; who controls the curriculum; the school's authority to make and enforce rules governing student and staff conduct on and off school grounds; the duty to protect the safety of students and others; child abuse; search and seizure; and due process. The course draws on the multidisciplinary perspectives of law, policy, research, and educational practice.

## ORLA 4155. Privatization and school

 choice (3)Professor Levin. This course addresses the increasing emphasis on market-type choice systems including educational vouchers, forprofit educational firms, and charter schools. Emphasis on the theory of emerging empirical evidence underlying these developments in education. Also listed as ITSF 4155.

## ORLA 4501. Special topics in education

 leadership and policy (3)Faculty. This course offers periodic exploration of topics and issues related to theory, research, policy, and practice in the organization, administration, and leadership of education in public and private contexts; issues in education policy formation, implementation, and analysis; and other related topics. Topics and emphases change each term. Course may be taken more than once.

## ORLA 4874. Strategic marketing for academic institutions (2)

Faculty. Students survey the major themes of marketing with specific attention to the independent school context. Topics include a
broad range of marketing concepts, such as ways to develop an effective communications program and branding. As part of the course, students design and undertake a market research project. Case studies are drawn from educational institutions.

ORLA 4876. School finance: Resource allocation for nonprofit organizations (3) Faculty. An exploration of the business aspects of managing private schools. The focus is on critical issues of management including: decision making, strategic planning, and analysis and allocation of resources. Participants analyze complex issues and problems confronting leaders in private schools such as: enrollment and tuition stabilization, pricing and affordability, funding sources, endowment management, compensation, and government compliance.

ORLA 4900. Research and independent study in education leadership (1-8)
Faculty. For students wishing to pursue independent study and/or research on topics not covered in regular courses. Requires faculty member's approval of a study plan, reading list, and final paper or other products or projects. Permission required from individual faculty.

ORLA 5002. Data analysis for policy and decision making II (3)
Professor Ready. This is an intermediate-level course in non-experimental quantitative research methods, especially those related to education policy. The class examines such topics as factor analysis, modeling non-linear relationships and interactions using regression, analyses of change, logistic and multinomial logistic regression, missing data analyses, and fixed effects models. Prerequisite: students should have completed at least one graduatelevel course in applied statistics or data analysis (e.g., ORLA 4002).

ORLA 5012. The social context of education reform: Public engagement and community development (3)
Dr. Monson. Political analysis of administration at the service delivery and community levels.

ORLA 5016. Educational equality:
The role of law (3)
Professors Heubert and Sigall. Historically, many barriers to educational equality - and many important efforts to overcome such barriers - have involved the law. This course examines major efforts to use law to attack discrimination and to ensure high-quality education for all children. Topics include: addressing racial segregation and concentrated poverty; the standards movement and high-stakes testing; the right to an adequate education; sex and gender discrimination; harassment; services for English-language learners; special education; and affirmative action. The course draws on the multidisciplinary perspectives of law, policy, research, and educational practice.

ORLA 5017. Groups and interpersonal behavior (2-6)
Faculty. Organizational behavior with reference to interpersonal relationships and the conflicts resulting from the needs of individuals compared to the demands of the organization. Special permission required.

ORLA 5018. School leadership for adult development (3)
Professor Drago-Severson. School leaders must exercise practices to support adult development, especially in the context of standardsbased reform. We will explore adult developmental theories and their connection to leadership; constructive-developmental theory; pillar practices for supporting adult growth (i.e., learning that helps adults develop increased cognitive and affective capacities to better manage the complexities of work and life). We consider: How can leaders better support adults' growth? What practices support adult development? What developmental principles inform these practices?

ORLA 5020. Information systems for decision making in learning organizations (2-3) Faculty. A theoretical, conceptual, and operational analysis of information systems used for decision making and problem solving in learning organizations. An integral part of the course involves developing the technical and analytical skills necessary to manage information systems, with an emphasis on those systems that are designed to make it possible for organizations to transform their informationbased systems into knowledge-based systems. Emphasis is also placed on understanding the environmental system in which the organization exists.

## ORLA 5025. Ecology of data-driven

 leadership (3)Professor Richards. This course relies upon systems theory and its application to school systems. The course teaches prospective leaders the use of databases of various kinds to pursue a systematic inquiry in the health and productivity of the ecology of the school. It explores various approaches to data mining, model building, and ultimately the "art of improvisational leadership." The course teaches students how to distinguish the different purposes for which data can be used and misused and relies heavily on the use of cases, simulations and exercises, including those with complex feedback systems. Familiarity with spreadsheets and simple statistics is helpful.

ORLA 5029. Staffing, mentoring, and supervising learning communities (3) Faculty. This course draws upon the research literature in human resources management and emphasizes best practice in the recruitment, hiring, mentoring, professional development, and evaluation of teachers including the termination of incompetent teachers. The course uses problem-based units on teacher recruitment and hiring, role playing on effective mentoring, video evaluations of teacher
practices, and strategies for removing incompetent teachers.

ORLA 5052. Instructional leadership of independent schools (2-3)
Faculty. The purpose of this course is to help prepare independent school educators for their roles as instructional leaders and to encourage reflection about the craft of teaching. It will provide an overview of contemporary theories and research about how people learn and how this knowledge can inform leadership in curriculum design, teaching strategies, student assessment practices, and the design of professional development.

ORLA 5055. School administration and cultural diversity (3)
Faculty. An in-depth exploration of opportunities and challenges posed by racial/ethnic, socioeconomic, linguistic, and other forms of cultural diversity in education. Focus on research on the lived experiences and educational outcomes of students from diverse backgrounds and on the implications for policy, politics, organizational design, and leadership practice.

## ORLA 5086. Education policy making

 and the courts (3)Professor Rebell. Beginning with the school desegregation decrees issued by the federal courts in the wake of Brown v. Board of Education, the federal and state courts have been called upon to consider a range of asserted educational rights and to oversee far-reaching institutional reforms that bear little relationship to traditional judicial remedies. This course will examine the legal and political justifications for the courts' role in making educational policy and reforming public institutions, as well as the courts' capacity to undertake these functions. The course will give particular attention to school desegregation and special education cases in the federal courts and education adequacy litigations in the state courts, including the recent decisions of the New York State Court of Appeals in CFE v. State of New York.

ORLA 5096. Introduction to special education law (3)
Faculty. This class provides an introduction to concepts and authorities essential to a basic, useful understanding of special education law and policy. It will benefit those concerned with school leadership, instruction, and school law, as well as those interested in special education law from practical or policy perspectives.

ORLA 5515. Master's seminar in leadership, policy, and politics (3) Professor Huerta. This seminar is designed to give students the opportunity to demonstrate a theoretical and analytical understanding of the practical problems inherent in conducting policy research for education clients. Policy analysis requires its practitioners to evaluate available information, to weigh the possible impacts of alternative policies; to understand political,
legal, and/or economic ramifications; and to produce plans for action that are organizationally feasible and publicly valuable.

ORLA 5530. Action research in organizational behavior (3)
Faculty. Techniques and methods of designing and conducting action research on organizational problems. Various methodological and organizational issues are addressed regarding the use of action research to foster organizational learning and problem solving through systematic inquiry and reflection. Students conduct an action research project.

## ORLA 5531. Leadership and action

 research practicum (3)Faculty. This course teaches students the theory of practice action research. Action research is a stance toward research that argues for using research to influence positive outcomes, even during the study phase of research. The methods themselves may be quantitative, qualitative, statistical, or some combination thereof. The purpose of the research design is to subordinate the research process to goal (e.g., of school improvement). At the same time, students develop the traditional skills of research methods, question deeply held presuppositions about "what works," and seek to become connoisseurs of effective knowledgedriven strategies of school improvement.

## ORLA 5532. Program development: Teaching, learning, and assessment (3)

ORLA 5541. Federal politics, federal policies, and administrators (3) Faculty. The course will begin with a theoretical discussion of the meaning of "equal educational opportunity" from a variety of philosophical, economic, educational, and political perspectives. We will then review the egalitarian concepts reflected in Congressional statutes, administrative regulations, and court decrees in such areas as school desegregation, bilingual education, and special education and the extent to which these legal mandates have, in practice, advanced educational opportunity.

ORLA 5587. Strategic management of independent schools and nonprofit organizations (1-3)
Professor Kane and faculty. The purpose of this class is to equip educators with the skills needed for effective independent school practice. Classes are organized to develop skills in the following broad areas: staffing and management, strategic planning and structural leadership, external relations, and transitioning into a new work environment. To develop proficiency in these important leadership skills, students have opportunities to learn about and then practice skills in the classroom context with feedback from peers and experienced practitioners. Permission required.

ORLA 5689. School heads colloquium (3) Professor Kane and faculty. Enrollment limited to 20 participants. The purpose of the symposium is to provide renewal and reflection on issues relevant to school leaders through intensive study and collaboration with professional peers from independent and international schools. Topics include moral leadership and current education issues in public and private schools. Participants also conduct research on a topic of interest to their schools. Through on-site visits, students use the diversity of schools in New York City and the rich cultural resources as a laboratory for learning. Permission required.

## ORLA 5830. The Klingenstein Summer

 Institute for early career teachers (4) Professor Kane. Residential program. Enrollment limited to 75 . An intensive two week program held annually in June that introduces early career teachers to the complexity and challenge of teaching in independent schools. Prominent professors, guest authors, and nationally renowned educators deepen understanding on topics related to the organizing themes: improving teaching and learning, understanding diversity and multiculturalism, and assessing and overcoming resistance to change. Permission required.ORLA 5880B. School Law Institute (3)
Professors Heubert, Rebell, and a national faculty. Explore important, timely issues of education law, including issues of race and poverty in education; serving English-language learners; the legal rights of students with disabilities; the right to an adequate education; and issues of safety and order (harassment, child abuse, tort liability, search and seizure, and cyber-bullying). For more information, see page 260, visit http://www.tc.edu/schoollaw, and/or contact Professor Jay Heubert at heubert@tc.edu.

## ORLA 6018. Staff personnel administration

 (3)Faculty. Human resource needs, certification, selection, assignment, promotion, salaries, retirement, absences, evaluation, development, tenure, academic freedom, teachers organizations, grievances, and collective negotiations.

ORLA 6019. Labor management relations in education (3)
Faculty. Enrollment limited. Negotiations as administrative process for decisions and management of patterns of remuneration and conditions of work. Cases and simulation. Special fee: $\$ 30$.

## ORLA 6020. Pro-seminar in education

 leadership (0-3)Faculty. This seminar course is topical and brings in guest speakers, exemplary practitioners, researchers and policy makers from academia, public schools and school districts, charter schools and education management organizations, private and independent schools, busi-
ness, and other organizations to share their experience, research, and insights about effective leadership practices. The central theme of the Pro-Seminar is the development of personal self-awareness and mastery, as well as professional effectiveness. Students will be introduced to a variety of tools, assessment instruments, and other resources that are useful for personal reflection and professional growth. The seminar is customized for students preparing for leadership at different levels and in different contexts, for example aspiring public school principals, independent school heads, or district level leaders.

## ORLA 6030. Sociology of formal organ-

 izations (3)Professor Huerta. An introduction to organizational theory as it applies to a variety of institutions with particular attention to the potential of educational activities as a force in formal organizations. Also listed as HUDF 6030.

ORLA 6460. Internship in school leadership (3)
Faculty. The internship in public school leadership presents an opportunity to become immersed in the field of leadership practice and to appreciate the importance of instructional leadership in the creation of a learning environment. The internship combines opportunities to study effective leadership first-hand, develop and practice instructional leadership skills, and be mentored for a career as a school principal. The internship requires approximately 450 hours ( $12-15$ hours per week over a full year) of supervised field work in a public school. Permission required.

ORLA 6461. Internship in public school district leadership (3)
Faculty. A 450 -hour supervised field experience in school district leadership. Partially satisfies New York State requirement for School District Leaders certificate. Permission required.

## ORLA 6540. Topics in urban education

 policy (3)Faculty. Leadership responsibility in the formulation, implementation, and assessment of urban education policy.

ORLA 6542. Social and political history of American education reform (3-4)
Faculty. Over the past century, educators have experienced wave after wave of reforms intended to address the latest education "crisis." This perpetual cycle of school improvement stems in part from the competing and often contradictory demands placed upon public education. In response, school improvement efforts have alternated between a focus on equity and excellence, progressive and traditional pedagogical approaches, centralized and decentralized governance, and private rights versus public needs. Students in this course will explore the social and political
roots of these pendulum swings and examine the historical forces that fuel America's desire for continual school reform. Issues of race, religion, class, and language-which are intimately tied to these tensions-are woven into the readings, discussions, and coursework. Permission of the instructor is required.

ORLA 6552. Research, theory, and practice in education leadership ( $0-2$ )
Faculty. This course focuses on major theoretical perspectives on administrative leadership in education, how these perspectives are studied and advanced through empirical research, and how the theory and research are connected to leadership practice. Students will examine theory and empirical research on topics such as leadership effects on student learning; challenges in leading learning organizations; and the relationships among leaders' knowledge, skills, and dispositions and their leadership preparation and effectiveness.

ORLA 6560. Advancement to doctoral candidacy seminar (3)
Faculty. Doctoral students with a minimum of 60 points toward the Ed.D. may enroll. Permission required.

ORLA 6611. Colloquium in organizational behavior (1-4)
Faculty. Emphasis on classic studies and analysis of the implications of research for organization theory and practice. Permission required.

ORLA 6621. Colloquium: Management science (1-4)
Professor Richards. Permission required.
ORLA 6631. Colloquium: Institutional analysis (1-4)
Professor Kane. Permission required.
ORLA 6641. Advanced topics in research methods and design (1-4)
Faculty. This course provides students the opportunity to explore advanced topics in research design and analytic methods, especially as they relate to studies of educational contexts and policies.

ORLA 6900. Directed research and study in education leadership (1-8)
Faculty. For students wishing to pursue independent study or original research as they prepare for their doctoral certification examination and/or dissertation proposal. Permission required from individual faculty.

## ORLA 7500. Dissertation seminar in

 education leadership (3)Faculty. This course provides students the opportunity to discuss topics related to the preparation of their dissertation proposal in a seminar format. Students present their ideas and writing for feedback from the instructor and other students. Students may enroll in this seminar once. Permission of the instructor is required.

ORLA 7501. Dissertation research seminar (3)

Faculty. This course provides students the opportunity to discuss their dissertation proposal in a seminar format, with support and feedback from the instructor and other students. Students are eligible to enroll in this seminar after enrolling in ORLA 7500 and before their dissertation proposal has been approved. Students may enroll in this course once. Permission of the instructor is required.

ORLA 7503. Research seminar (3)
Faculty. This course provides students the opportunity to discuss their dissertation research in a seminar format, with support and feedback from the instructor and other students. Students are eligible to enroll in this seminar after their dissertation proposal has been approved. Students may enroll in this course once. Permission of the instructor is required.

ORLA 7573. Advanced seminar (3) Faculty. This seminar provides an opportunity for students to share their dissertation work with others and to consider questions of interpretation, significance, and the presentation of findings for multiple audiences.

ORLA 8900. Dissertation advisement in education leadership (0)
Faculty. Individual advisement on the doctoral dissertation. Students register for this in the first semester after their dissertation proposal has been approved and continue registering in this (or in another course, with sponsor approval) until the dissertation is completed. Requires ongoing consultation between the student and dissertation sponsor. The fee equals three points at the current tuition rate for each term. Permission required from individual faculty.

## HIGHER AND <br> POSTSECONDARY EDUCATION

Program Coordinator:
Professor Anna Neumann

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\begin{array}{ll}
\text { Program Office: } & \text { (212) 678-3750 } \\
\text { Email: } & \text { highered@tc.edu }
\end{array}
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Website: www.tc.edu/o\&l/HigherEd

## Degrees Offered:

HIGHER AND POSTSECONDARY
EDUCATION (HIGH)
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## Program Description:

The Higher and Postsecondary Education Program at Teachers College, Columbia University strives to create knowledge, knowledgeable practitioners, and practicing scholars concerned broadly with teaching, learning, and scholarly and professional development; organizational and institutional analysis, including abilities to probe and develop the structures, processes, policies, and technologies that comprise colleges, universities, and state and national systems of tertiary education; and social and comparative perspectives, with attention to the social, cultural, economic, and historical contexts of knowledge production, policy, and institutional development. We expect that students will work within and across these domains, developing programs of study that, though focused on particular themes and issues (e.g., policy, scholarly learning and careers, student development, professional development), will be informed broadly by a diverse array of ideas, perspectives, and questions.

The Master of Arts Program develops knowledgeable practitioners in three domains of higher and postsecondary education: its educational core (teaching and learning, student and professional development), its organizational and institutional framework (policymaking and implementation, planning, organizational development), and its social positioning and comparative potential (policy analysis and comparative study of institutional, state, and national systems). Though students entering the M.A. Program will be exposed to each of the domains, they will specialize in one.

Students who pursue the M.A. degree at Teachers College will build on the program's historic strength in the study of student development through the college years and in its new strengths in higher/postsecondary educa-
tion policy, social thought, and comparative analysis, as well as on the department's offerings in organizational studies. As such, students earning the M.A. degree will be positioned to serve in a variety of academic and student support positions, as well as in various policy-development, policy-support, and administrative roles.

The Master of Education Program develops breadth of understanding of higher and postsecondary education, though emphasizing particular domains of study and practice, among them academic learning and development, organizational and institutional processes, and social and comparative perspectives. Students in the Ed.M. Program typically use these offerings to elaborate and deepen their experiencebased knowledge and intellectual interests in policymaking, curriculum development, student development, etc. Ed.M. students conclude their programs of study by writing an integrative paper focused on a particular topic of professional and personal interest and drawing on the knowledge resources availed by the three curricular domains.

Students who pursue the Ed.M. in Higher and Postsecondary Education at Teachers College, Columbia University typically bring to their studies well developed understandings of particular facets of the enterprise, often from their own participation in the professional practices that define it (teaching, administration, policy-making etc.). The Ed.M. Program helps them situate their practice-based knowledge and their emerging intellectual interests, within the broader span of higher and postsecondary education thereby availing expanded intellectual resources for their professional efforts.

The Doctor of Education Program develops breadth of understanding about higher and postsecondary education, though with focus on an intellectual issue or professional activity (concentration or emphasis area). Breadth is assured through study within three curricular domains: academic and developmental analysis of higher and postsecondary education, organizational and institutional analysis of higher and postsecondary education, and social and comparative analysis of higher and postsecondary education. Working across these domains and beyond them (through related out-of-program courses), students will work with faculty advisors to develop emphasis areas, among them policy studies, diversity and access studies, studies in student learning and development, and studies of scholarly learning and careers.

Students who pursue the Ed.D. in Higher and Postsecondary Education question and explore the range of perspectives for understanding the enterprise- its educational and intellectual core, its institutional/organizational rubrics, and its social and comparative contextualizations. Thus, through their own research (situated within an emphasis area), they participate in reshaping current understandings of postsecondary education. Ed.D. students conclude their programs by writing a dissertation that, though focused on a particular research problem within higher and postsecondary education, reflects the tripartite aims of the curriculum, as well as deep understanding of knowledge structures underpinning their area of inquiry. They are positioned then to scrutinize prevailing views of what it means to engage in the "higher learning," and importantly, of what it means to reconstruct these views in the name of improvement and development.

Graduates of the Ed.D. Program may become policy-makers and evaluation specialists in higher and postsecondary education; they may assume substantial leadership responsibilities, as through presidencies or other key administrative posts in colleges and universities or state systems; they may lead university- or col-lege-wide instructional development centers and activities; they may become academic scholars and researchers.

## Special Application Requirements/Information:

Applications are considered for fall enrollment only. Applicants to all degree levels should discuss their past educational preparation and professional goals in their personal statements, including their anticipated work within the degree program to which they are applying. In addition to the general application documentation required, all applicants must submit an academic writing sample (e.g., a class paper). Ed.M. and Ed.D. applicants should submit a paper written for a graduate-level class. Ed.M. applicants should have an M.A. in a relevant discipline or field. Relevant work experience is also helpful. Doctoral applicants should have a master's degree in a relevant discipline or field and work experience in higher/postsecondary education.

## Degree Requirements:

Note the basic research requirements for all students in the department.

The following requirements constitute frameworks for guiding program planning which occurs in consultation with the designated faculty advisor and requires approval of the Higher and Postsecondary Education Program faculty. The coursework portion of each degree
program consists of required courses (offered annually or in alternate years), within-Program electives, and extra-Program electives; other requirements, unique to a program or portion thereof, are indicated below.

## Master of Arts

The M.A. requires a minimum of 32 points of graduate coursework. Students pursue one of three domain sequences: Academic and Developmental Analysis, Organizational and Institutional Analysis, or Social and Comparative Analysis.

## Course requirements common to all sequences include:

- ORL 5521 Introduction to research methods in education (3) or equivalent with advisor approval
- ORLH $4010 \quad$ Purposes and policies of higher education (3)
- ORLH $4011 \quad$ Curriculum and instruction in higher education (3)
- ORLH 4040 The American college student (3)
- ORLH 5525 College student development theories (3)


## Additional requirements for Academic and Developmental Analysis include the following coursework as well as a culminating project:

- ORLH 4041 Student personnel administration: Organization, functions, and issues (3) or other with advisor approval
- ORLH 4042 Student personnel administration: Programs and services (3) or other with advisor approval

Two (2) courses from the following: - ORLH 4012 The community college (3)

- ORLD 4051 How adults learn (3)
- ORLH 5011 College teaching and
- ORLH 5044 Theories of diversity in
higher education (3)
- ORLH 5522 Contemporary student
- ORLH 5524 issues and politics (3)
- Analysis ofstudent
- ORLH 5527 The college professoriate (3)
- Other ORLH courses with advisor's approval (3)
- Other Courses: M.A. students with internship must take ORLH 5241, Observation and Supervised Fieldwork in Higher and Postsecondary Education (1 point). Non-internship students elect another Teachers College course with advisor approval (1 point).
- Minimum of two out-of-program Teachers College elective courses - one 3-point course and one 1-point course - for a total of 4 points. These courses require advisor approval (4 points).

Additional requirements for Organizational and Institutional Analysis include the following coursework as well as a culminating project:

- ORLH 4031

> Financial administration of higher education institutions (3)

Three (3) courses from the following:

- ORLH 4012 The community college (3)
- ORLH 4020 College and university organization and administration (3)
- ORLH 4025 Higher education policy (3)
- ORLD 4051 How adults learn (3)
- ORLH 4500 Special topics in higher education (topic/section to be designated with advisor approval)
- ORLH $5011 \quad$ College teaching and learning (3)
- ORLH 5527 The college professoriate (3)
- ORLH 6521 Advanced seminar in the
- ORLH 6551 Advanced seminar in higher
- ORLH 6556 Educational leadership:

Research, art, and practice (3)

- A\&HH 5070 History and theory of higher education (3)
- Other Courses: M.A. students with internship must take ORLH 5241, Observation and Supervised Fieldwork in Higher and Postsecondary Education (1 point). Noninternship students elect another Teachers College course with advisor approval. (1 point).
- Minimum of two additional out-of-program Teachers College elective courses - one 3 -point course and one 1 -point course for a total of 4 points. These courses require advisor approval (4 points).

Requirements for Social and Comparative Analysis include the following coursework as well as a culminating project:
Four courses from the following:

- ORLD 4051 How adults learn (3)
- ORLH 4025 Higher education policy (3)
- ORLH 4500 Special topics in higher education (3) with advisor approval
- ORLH 5011 College teaching and
- ORLH 5044 Theories of diversity in
higher education (3)
- ORLH 5522 Contemporary student issues (3)
- ORLH 5524
- ORLH 5527
- ORLH 6551
- ORLH 6556
- A\&HH 5070

Analysis of student
cultures (3)
The college professoriate (3)
Advanced seminar in higher education: (3) Education leadership: Research, art, and practice (3) History and theory of higher education (3)

- Other Courses: M.A. students with internship must take ORLH 5241, Observation and Supervised Fieldwork in Higher and Postsecondary Education (1 point). Noninternship students elect another Teachers College course with advisor approval (1 point).
- Minimum of two additional out-of-program Teachers College elective courses - one 3 -point course and one 1 -point course for a total of 4 points. These courses require advisor approval (4 points).


## Master of Education

The Ed.M. requires a minimum of 60 points and an integrative paper prepared as a culminating project.

Core courses (required):

- ORL 5521 Introduction to research methods in education (3), or equivalent with advisor approval
- ORLH 4010 Purposes and policies of
- ORLH 4011 Curriculum and instruction in higher education (3)
- ORLH 4020 College and university organization and administration (3), or equivalent
- ORLH 4025 Higher education policy (3)
- ORLH 4031 Financial administration of higher education institutions (3)
- ORLH 5044 Theories of diversity in higher education (3)
- ORLH 5526 Advanced professional seminar: The literature of higher education (3)
- ORLH 5527 The college professoriate (3)
- ORLH 6511 Coordinating seminar in
higher education (3)
- ORLH 6551 Advanced seminar in higher education II (3); or
- ORLH 5011 College teaching and learning (3)
- ORLH 6900 Research and independent study in higher education, ORLH 6557/8 Research practices in higher education, or other with advisor approval (3) (Integrative paper is prepared in this course.)

Of the remaining eight courses ( 24 points), five courses ( 15 points) should be within the Program. The remaining three courses ( 9 points) should be from outside the Program.

All courses should relate conceptually, substantively, or methodologically to the student's developing area of interest.

Internships may be open to Ed.M. students on a space-available basis but require approval of faculty advisor and program coordinator, including possible addition of course requirements.

## Doctor of Education

The Ed.D. requires a minimum of 90 points of graduate coursework, completion of a certification exam, and the writing and successful defense of a dissertation.

Core courses required:

- ORL 5521

Introduction to research methods in education (3) or equivalent with advisor approval

- ORLH $4010 \quad$ Purposes and policies of higher education (3)
- ORLH 4011 Curriculum and instruction in higher education (3)
- ORLH 4020 College and university organization and administration (3)
- ORLH 4025 Higher education policy (3)
- ORLH 4031 Financial administration of higher education institutions (3)
- ORLH 5021 Patterns of organization and management in higher education (3)
- ORLH 5044 Theories of diversity in higher education (3)
- ORLH 5526
- ORLH 5527 The college professoriate (3)
- ORLH 6511 Coordinating seminar in
- ORIH 6551 higher education (3)
higher education II (3)
- ORLH 5011 College teaching and learning (3)
- In addition to ORL 5521, all Ed.D. students must take a minimum of three additional research courses to be selected relative to student's research preparation needs. See department core requirements.

Remaining fifteen courses ( 45 points) are to be distributed as follows:

- Five courses within the Program with advisor approval. The chosen concentration must represent a coherent area of study that broadly situates dissertation research.
- Five courses outside the Program, with at least three of these outside the department. Chosen with advisor approval, these courses must contribute substantively, theoretically, or methodologically to the student's selected area of study.
- Five courses within or outside the program, with advisor approval.

Internships are open to doctoral students on a space-available basis, but require approval of faculty advisor and program coordinator, including possible addition of course requirements.

Adjustments to requirements and distributions, as shown for the M.A., Ed.M., and Ed.D. in Higher and Postsecondary Education, require approval of the advisor and program coordinator.

## COURSES:

ORLH 4010. Purposes and policies of higher education (3)
Faculty. An introduction to the U.S. system of higher education through an overview of the system and its history, a survey of the missions and purposes served by U.S. colleges and universities, and an investigation of some of the pressing policy questions now confronting those institutions.

ORLH 4011. Curriculum and instruction in higher education (3)
Professor Neumann. An introduction to trends and issues pertaining to curriculum and instruction in U.S. higher education. Internal and external influences on curriculum and teaching, and implications for college and university classrooms. Examination of key trends and developments, including the impact of the new scholarship of teaching.

ORLH 4012. The community college (3) Faculty. Emerging issues, problems, and trends in community colleges, technical institutes, and adult education. Topics include the history and philosophy of the community college movement, governance and finance, teaching, student personnel work, impact on students, and the future of the community college.

ORLH 4020. College and university organization and administration (3)
Faculty. Basic aspects of college and university organization and administration with consideration given to the roles of various groups in governance and management as well as organizational processes such as leadership, decision making, and conflict resolution. External and internal constraints examined from conceptual, practical, and policy perspectives.

ORLH 4022. College personnel policies and practices (3)
Faculty. Personnel problems in colleges, including faculty and staff evaluation, recruitment, affirmative action, promotion, tenure, retrenchment, leadership/management, and personnel development.

ORLH 4030. The economics of postsecondary education (3)
Faculty. A theoretical and practical discussion
of public/private finance of higher education. Economic and social rationales are discussed as well as specific financing proposals.

ORLH 4031. Financial administration of higher education institutions (3) Professor Baldwin. No financial training is required. Introduction to the financial pressures facing colleges and universities and the various kinds of solutions they have adopted to meet those pressures. Topics include strategic planning, cost cutting, outsourcing, enrollment planning, new curricula, and fund raising.

ORLH 4040. The American college student (3)
Professor Dougherty. Reviews the demographic data about student access to college, the determinants of social class, race and gender differences in college access and choice, and the influence of colleges upon students.

ORLH 4041. Student personnel administration: Organization, functions, and issues (3) Dr. Rock. Permission required. An introduction to various forms of organization and functions: multidisciplinary foundations, including historical and philosophical foundations and conceptual and research contributions from the behavioral and social sciences.

ORLH 4042. Student personnel administration: Programs and services (3)
Dr. Thomas. A survey of programs and services typical of American colleges and universities. Includes contemporary issues of concern to student personnel administrators.

ORLH 4043. Developmental academic advisement programs in colleges and universities (3)
Faculty. A survey of theory and research and an examination of the various organizational, administrative, and staffing arrangements that pertain to student advisement programs in colleges and universities.

## ORLH 4500. Special topics in higher

 education (1-3)Faculty. Periodic explorations of special topics and issues in fields of higher education administration, student personnel administration, college teaching, academic leadership, and higher education policy.

## ORLH 4800. Workshop in higher education

 (1-3)Faculty. Special topics or events related to the administration of programs of higher education. Topics change each semester.

ORLH 4820. Cultural diversity training in higher education settings: Issues and concerns (0-1)
Faculty. This introductory workshop will address multicultural training issues in higher education such as workshop and intervention design, assessment issues and methods, ethical concerns, group process, and general training considerations.

ORLH 4830. Transforming the curriculum: Theory and practice (3)
Faculty. This course is designed to explore both the cognitive and cultural implications of curriculum design. It emphasizes the theoretical and practical implications of curricular transformation based on the new scholarship of gender, race, ethnicity, and class, as well as student intellectual and interpersonal development.

ORLH 4845. Diversity: Implications for recruitment and retention (3)
Faculty. Students will explore diversity (race, class and gender) concerns affecting the recruitment and retention of diverse student and faculty populations in the context of American higher education.

ORLH 5011. College teaching and learning (3)

Professor Neumann. Designed for individuals who aspire to college teaching. This course emphasizes research on student learning, multiple pedagogies (such as experiential learning, learning communities, effective lecture, discussion, evaluation approaches, and curriculum design). The course stresses the implications of diversity in the student population.

ORLH 5021. Patterns of organization and management in higher education (3) Faculty. The study of college and university organization from multiple perspectives, with emphasis given to understanding their implications.

## ORLH 5044. Theories of diversity in

 higher education (3)Faculty. Critical analysis of cultural diversity in American higher education with respect to the curriculum, co-curriculum, and institutional structure. Presents new paradigms with which to understand the complexities of response that are necessary to adequately meet the needs of all students.

ORLH 5241-ORLH 5242. Observation and supervised fieldwork in higher and postsecondary education (0-3)
Faculty. Permission required. Students reserve two days a week for work in colleges. A seminar integrates field practices with course theory. Required of all students doing an internship.

## ORLH 5522-ORLH 5527. Advanced professional seminar

Faculty. Intensive analysis of selected problems and issues in postsecondary education. The course is intended for practicing professionals in postsecondary education as well as majors in the program. Other students in the college who wish to enroll should obtain permission of the instructor.

- ORLH 5522. Contemporary student issues and policies (3)
Dr. Christensen. Exploration of issues affecting students and policies to address those issues. Some topics to be covered
are student activism and academic freedom; gendered structures and career advancement; intercollegiate athletics; and the contradictory cultures of singlesex colleges, two-year colleges, professional schools, and research universities.
- ORLH 5524. An analysis of student cultures (3)
Dr. Christensen. Critical analysis of selected research reports pertaining to the student cultures. The focus is on the purposes of each study, the question(s) asked, the assumptions and theories upon which the research is based, the sources of data, the method(s) of data collection, the conclusions and interpretations developed, and the relevance of the research to student personnel in particular and to higher education in general.
- ORLH 5525. College student development theories (3)
Dr. Christensen. Course focuses on college student development theories and their application to higher education. Primary areas of focus include: (1) intellectual and ethical developmental theory, individual development models, learning styles models, and theories of cultural identity, (2) ethical considerations using theory in practice, and (3) critique of theories from a variety of research perspectives.
- ORLH 5526. The literature of higher education (3)
Professor Neumann. Permission required if not a student in the program. Intensive analysis of research/writings on problems and issues in postsecondary education. The course is intended for Ed.M. and Ed.D. students in the program. Other students in the college who wish to enroll should obtain permission of the instructor. Analysis of selected classic and contemporary works that have influenced thought and affected public opinion and public policy related to higher education. Topics vary from year to year.
- ORLH 5527. The college professoriate (3)

Professor Neumann. Review and discussion of the research and literature, diverse roles, and expectations that characterize the position of college professor, with attention to implications for professional and personal development.

ORLH 5533-ORLH 5537. Advanced professional skills (2-3)
Faculty. Intensive work in special skill areas for the management of postsecondary education. The sections involve practical experiences and possibly fieldwork. These courses are intended for practicing professionals in postsecondary education as well as for majors in the Program. Other students who wish to enroll should obtain the permission of the instructor.

- ORLH 5533. Faculty evaluation and development (2-3)
Faculty. Theory and practice concerning the evaluation and improvement of college teaching. Topics include models and practices for the evaluation of faculty and for the organization and administration of faculty development programs.
- ORLH 5534. Financial decision making in education (2-3)
Faculty. Introduction to a series of financial decision-making tools including cost accounting, cost benefit analysis, and discounted cash flow. Emphasis on applied financial decision making.
- ORLH 5536. College classroom assessment (3)
Faculty. An in-depth study of major assessment techniques for the college classroom. Particular attention will be paid to assessment models associated with collaborative learning, teaching portfolios, and student portfolios.
- ORLH 5537. College classroom assessment research (3)
Faculty. Prerequisite: ORLH 5536. Indepth study of classroom research methods based on the classroom assessment methods studied in ORLH 5536.


## ORLH 6511. Coordinating seminar

 in higher education (3)Faculty. Permission required. Course restricted to Ed.D. and Ed.M. students in the Higher Education program. An overview and discussion of the most topical literature in American higher education, this course is designed to explore a wide variety of educational roles in the context of the goals and aspirations of new doctoral students.

ORLH 6520-ORLH 6521. Advanced seminar in the community college (3)
Faculty. Selected issues such as teaching in a community college, the future of the community college, or state and national governance and finance systems for the community college are explored in depth.

ORLH 6550-ORLH 6551. Advanced seminar in higher education (2-3)
Faculty. Intensive study of a selected topic. Topic varies from term to term and is typically related to an ongoing program or research project. Students may begin either term.

ORLH 6552. Advanced seminar in theories of intellectual and ethical development for college students (3)
Faculty. Permission required. Intensive study of the major theories of college student intellectual development, particularly the work of Carol Gilligan, Lawrence Kohlberg, William G. Perry, Jr., Katie Cannon, and those who have expanded the research on student intellectual and ethical development. Additional models
considered include Reflective Judgment and Women's Ways of Knowing. Students will also learn the assessment and scoring methods associated with each model.

ORLH 6556. Educational leadership: Research, art, and practice (3)
Faculty. Examination of leadership research definition, dimensions, characteristics, and capacities. Exploration of leadership opportunities within entire range of educational practice. Application of leadership lessons to educational problems and situations through case studies.

## Directed Research and Independent Study

All the following courses require permission of instructor:

ORLH 4900. Research and independent study in higher education (1-8)
Faculty.
ORLH 5900. Research in higher education (1-6)
Faculty.
ORLH 6557-6558. Research practices in higher education (1-3)
Faculty.
ORLH 6900. Research and independent study in higher education (1-6)
Faculty.

## ORLH 7500. Dissertation seminar in higher education (1)

Faculty. Students should have completed most or all coursework (including research methods courses) and have passed the certification examination. Students register for the course the semester a proposal hearing is to be scheduled. The course is intended for students who have identified a reasonably narrow area for research and have already completed a preliminary literature review. The course will assist the student in design, methods, and other matters of concern in the preparation of an acceptable dissertation proposal.

## ORLH 7900. Directed dissertation in

 research (3)Faculty. All doctoral students eligible for this course must register each semester until a proposal hearing has occurred and a proposal has been approved.

## ORLH 8900. Dissertation advisement in higher education (0)

Faculty. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

ORLH 9900. Research and independent study in higher education (2 or more) Faculty.

See also:
A\&HH 5070. History and theory of higher education (3)
Please see the Department of Arts and Humanities for course description.

CCPJ 4064. Theories of counseling (3)
Please see the Department of Counseling and Clinical Psychology for course description.

CCPJ 5062. Career counseling (3) Please see the Department of Counseling and Clinical Psychology for course description.

CCPJ 5164. Cross-cultural counseling (3) Please see the Department of Counseling and Clinical Psychology for course description.

HUDF 4000 . Education and public policy (3) Please see the Department of Human Development for course description.

HUDF 4021. Sociology of education (3) Please see the Department of Human Development for course description.

HUDK 4024. Developmental psychology: Adulthood and the lifespan (2-3)
Please see the Department of Human Development for course description.

ITSF 4050. Economics of education (3)
Please see the Department of International and Transcultural Studies for course description.

## ITSF 4058. Economics of higher education (3)

Please see the Department of International and Transcultural Studies for course description.

MSTU 4030. Computer applications in education (3)
Please see the Department of Mathematics, Science, and Technology for course description.

## ORL 5521. Introduction to research

 methods in education (3)Faculty. Please see course description under the Departmental Core Requirements at the beginning of this department section.

ORLA 4010. Introduction to organization and change theory in education (3)
Please see course description in this department section.

ORLA 5017. Organizations and interpersonal behavior (3)
Please see course description in this department section.

ORLD 4051. How adults learn (3)
Please see course description in this department section.

ORLJ 4002. Functions of organizations (3) Please see course description in this department section.

ORLJ 4005. Organizational psychology (3) Please see course description in this department section.

## NURSE EXECUTIVE

Program Coordinator:
Professor Elaine La Monica Rigolosi
Program Office: (212) 678-3421
Email: nurseexecutives@tc.edu
Website: www.tc.edu/o\&l/NurseExec

## Degrees Offered:

NURSE EXECUTIVE ROLE-
COHORT PROGRAM (NEXM)
Master of Arts (M.A.)
NURSING EDUCATION:
PROFESSORIAL ROLE- COHORT PROGRAM (NEPM)
Master of Arts (M.A.)
NURSE EXECUTIVE ROLE (NEXD)
Doctor of Education (Ed.D.)

## Program Description:

The Executive Program for Nurses prepares students for leading roles in healthcare organizations, both service and education. These roles are those that advance and implement the practice of nursing and healthcare, operating primarily in one-to-one relationships with clients. Hence, the graduates of this program will have their major impact on nursing and healthcare by influencing other interdisciplinary healthcare providers.

The basic aims of current healthcare delivery and healthcare reform mandate a non-partisan approach to the education of nurses and all healthcare administrators and executives. Professionals who practice in today's healthcare environments and shape tomorrow's reform must be collaborative interdisciplinarians.

Nursing leadership in scholarship, in research, and in practice is achieved with the attainment of the doctoral degree. Toward this ultimate goal, there are various development levels of role preparation, including an exit point of achievement at the level of Master of Arts (48 points). All role preparation in the Executive Program for Nurses is based upon approaches of open inquiry, scholarly pursuit, and the ability to synthesize knowledge from diverse disciplines.

## Master of Arts

The Master of Arts degree offers preparation for nursing and healthcare management positions as well as preparation for roles in nursing education. Two specializations are offered: administration studies, emphasizing the basic skills and concepts of management; and professorial studies, which prepares learners for beginning positions in teaching.

The accelerated program at the M.A. level in both specializations is a cohort program that meets one day per week on Fridays. It runs for four semesters. Program costs for the student cohort beginning September 2011 are $\$ 14,250$ per semester of study and include tuition and refreshments. The flat rate covers cohort courses only. The cost of the program is subject to change.

## Special Application <br> Requirements/Information:

## Master of Arts

In addition to the requirements for admission to Teachers College, in order to be considered for admission in the program, applicants must be Registered Nurses in any U.S. state or in Canada and hold a baccalaureate degree in any field, with a cumulative grade point average of 3.0 or better. One year of post-baccalaureate management experience is required for administration studies and one year of post-baccalaureate full-time clinical nursing practice experience is required for professorial studies.

The accelerated Master of Arts cohort usually begins every other Fall in even years.

## Doctor of Education

In addition to the requirements for admission to Teachers College, in order to be considered for admission into the program, doctoral applicants must:

- Hold a baccalaureate degree with a major in any field that is approved by Teachers
College, Columbia University;
- Hold a graduate degree and/or 36 graduate points/credits approved by Teachers College, Columbia University;
- Hold a current Registered Nurse License in a state in the U.S. or in a province of Canada;
- Have an eighth decile on graduate work at Teachers College or a cumulative grade point average of 3.5 from other accredited institutions;
- Have a GRE verbal score of at least 540 or an MAT score of at least 416. Results of the GRE or MAT should not be more than 5 years old; and
- Have one year of post-baccalaureate management experience.

International applicants should note that a current permit from the New York State Board of Nursing is required to practice nursing and/or do fieldwork. Potential candidates who do not meet these admission standards but who can demonstrate substantial ability shall have the option to petition the faculty of the program to be considered for admission based on alternative evidence of ability.

The next accelerated Doctor of Education cohort is scheduled to begin in the Fall 2012 semester.

## Degree Requirements:

Note the basic research requirements for all students in the department.

The Capstone Project is a requirement for all Master's degree candidates. It is required during the semester in which a student applies for a Master's degree. Details are provided in "Guidelines for the Capstone Project" which can be obtained from the office of the Executive Program for Nurses and from Faculty Advisors. The following are examples of the Master's Cohort sequence by semester.*

## Master of Arts NURSE EXECUTIVE ROLECohort Program

| Semester I |  |
| :---: | :---: |
| - ORL 4014 | Legal issues in healthcare organizations (3) |
| - ORL 4054 | Leadership and management in healthcare organizations (3) |
| - ORLN 4005 <br> - HUDM 4120 | Theories of nursing (3) Basic concepts in statistics (3) |
| Semester II |  |
| - ORL 4011 | Personnel management in healthcare (3) |
| - ORLN 5000 | Nursing science (3) |
| - ORLN 5013 | Informatics in nursing (3) |
| Semester III |  |
|  | nursing organization (3) |
| - ORLN 5040 | Methods in nursing research (3) |
| - ORLN 5530 | Seminar: Clinical teaching and evaluation (3) |
| - HUD 4120 | Methods of empirical research (3) |
|  |  |
| - ORLN 4050 | Health problems and issues in society (3) |
| - ORLN 5010 | Administration of a nursing organization (3) |

- ORLN 6501

Seminar in professional nursing (3)

## Master of Arts <br> NURSING EDUCATION Professorial <br> Role- Cohort Program <br> Semester I <br> - ORL 4014 Legal issues in healthcare organizations (3) <br> - ORL 4054 Leadership and management <br> - ORIN 4005 in healthcare organizations (3) <br> ORL 4005 Theories of nursing (3) <br> - HUDM 4120 Basic concepts in statistics <br> (3)

Semester II

- ORL 4003
- ORLD 4053

Crisis intervention (3)
Facilitating adult learning

- ORLN $5000 \quad$ Nursing science (3)
- ORLN 5013 Informatics in nursing (3)

Semester III

- ORLD 4844

Helping adults learn (3)

- ORLD 5055 Staff development and
- ORLN 5040 Methods in nursing
- ORLN 5530
research (3)
Seminar: Clinical teaching and evaluation (3)

Semester IV

- ORLD 4051
- ORLN 4050

How adults learn (3)
Health problems and issues in society (3)

- ORLN 5230

Fieldwork in nursing education (3)

- ORLN 6501 Seminar in professional nursing (3)
* Courses and/or sequence are subject to change.


## Doctor of Education NURSE EXECUTIVE ROLE

The Accelerated Program at the Ed.D. level is a cohort program that meets one day per week on Fridays. The program consists of six semesters of coursework leading to the Ed.D. degree in addition to satisfactory completion of a doctoral dissertation. Program costs currently are $\$ 12,000$ per semester of study and include tuition, fees, and refreshments. The flat rate fee covers cohort courses only. The flat rate tuition fee for the cohort beginning Fall 2012, will be determined at a later date.

For program course recommendations and program planning, please see the Doctor of Education Advisement Guide which can be obtained from the office of the Executive Program for Nurses. The following is an example of a doctoral cohort sequence by semester.*

Semester I

- ORLN 5005 Interdisciplinary theory in nursing (3)
- ORLN 6514

Marketing nursing programs and services (3)

- HUDM 4122 Probability and statistical inference (3)
Semester II
- ORL 5551
- ORL 6500 Qualitative research methods Qualitative research methods
in organizations: Design and data collection (3)
- ORLN 6615 Colloquium in nursing administration (3)

Semester III

- ORLN 5043 Nursing research
development (3)
- ORLN 6522 Policy formation and governance in health care (3)
- A\&HF 4090 Philosophies of education (3)


## Certification

Semester IV

- ORL 6011
- ORLN 6014
- ORLN 6540

Advanced system management (3) Managing the socially responsible organization (3)
Dissertation design development (3)

Semester V

- ORLN 5011

Designing, planning, and monitoring the healthcare system (3)

- ORLN 6541 Advanced dissertation design development (3)
- ORLN 7500 Dissertation seminar in nursing education (3)

Semester VI

- ORLN 6511 Innovations in nursing management (3)
- ORLN 6635 Colloquium in nursing education (3)
- ORLN 7900 Directed dissertation research (3)
* Courses and/or sequence are subject to change

Note: After coursework is completed, candidates must be continuously enrolled every fall and spring semester, up to and including the semester in which the dissertation defense is held and the revised and/or completed dissertation is submitted to the Office of Doctoral Studies. Course selection: Courses that may be taken include ORLN 6940, ORLN 6941 or ORLN 8900, and are based on the advice of the candidate's advisor.

## COURSES:

The following are recommended as general, interdepartmental courses appropriate for students throughout the College as electives and may also be utilized by non-majors to meet the college breadth requirement. See General Offerings and Interdisciplinary Study for a course description.

ORL 4003. Crisis intervention (3)
Faculty. Study of general crisis phenomena within the framework of crisis intervention theory. Analysis of individual, family, and community dynamics.

ORL 4011. Personnel management in healthcare (3)
Professor Rigolosi. Examination and application of personnel management and human relations theory in the healthcare organization. Includes human resource utilization, problem solving, comunications theory, and evaluation performance. Special fee: $\$ 25$.

ORL 4014. Legal issues in healthcare organizations (3)
Professor Rigolosi. Laws, administrative regulations, and pertinent case law affecting healthcare organizations. Theories of power, politics, and labor relations applied. Local, state, and federal impact on healthcare included. Special fee: $\$ 25$.

ORL 4054. Leadership and management in healthcare organizations (3)
Professor Rigolosi. Critical analysis of theory and research in organizational behavior, leadership, and management as it relates to the role of healthcare executives. Critique of the executive's role as it relates to these theories. Special fee: $\$ 25$.

## ORL 5551. Ethics for healthcare

 professionals (3)Faculty. Review of ethical issues in healthcare and healthcare delivery. Special fee: $\$ 150$.

## ORL 6011. Advanced system

management (3)
Faculty. Managing systems requires the generation of useful information for decision-making. This course focuses on using information for strategic planning and management of systems in healthcare.

## Nursing Theory

ORLN 4005. Theories of nursing (3)
Faculty. Theoretical foundations of nursing. Critical analysis of theories that explain the nature of nursing practice.

ORLN 5000. Nursing science (3)
Faculty. Prerequisite: ORLN 4005.
Examination of emerging issues in nursing research and healthcare. Relevance to theory development and health policy are emphasized.

ORLN 5005. Interdisciplinary theory in nursing (3)
Faculty. Prerequisites: ORLN 4005, ORLN 4050, or equivalent. Evaluation of utility of theories and models from related disciplines in posing research problems in nursing. Focus on strategies of concept analysis and theory derivation.

## Professional Nursing

ORLN 4001. Contemporary issues in nursing (3)
Faculty. Identification and analysis of current issues in nursing; development of appropriate background; formulation of personal stances on selected issues.

## ORLN 4004. Historical trends in

 nursing (3)Faculty. Consideration of the history of nursing and nursing education and its influence on current developments in nursing.

ORLN 4050. Health problems and issues in society (3)
Faculty. Political and economic concepts influencing the delivery of healthcare services. Consideration of health issues facing the public and possible courses of action.

ORLN 5908. Independent study in professional nursing (1-6)
Faculty. Permission required. Individual, guided learning experience at the master's level in a selected aspect of professional nursing. Topic agreed upon between student and faculty.

ORLN 6501. Seminar in professional nursing (3)
Faculty. Prerequisites: Two courses in nursing professionalism and/or history. Examination of selected professional nursing problems or domain in depth. Course may be repeated for credit if different topics are covered.

ORLN 6908. Independent study in professional nursing (1-6)
Faculty. Permission required. Individual, guided learning experience at the doctoral level in a selected aspect of professional nursing. Topic agreed upon between student and faculty.

## Nursing Research

## ORLN 5040. Methods in nursing

research (3)
Faculty. Prerequisites: ORLN 4005, ORLN 5000. Analysis of hypothetical generation, study designs, and data collection methods in nursing research with emphasis on application to practice.

ORLN 5043. Nursing research development (3)

Faculty. Prerequisites: ORLN 4005, ORLN 5040, or equivalents. Philosophical foundations of empirical and naturalistic inquiry
methods are examined with reference to developing a domain-significant research problem. Emphasis given to clarification to study design within interdisciplinary knowledge relevant to nursing.

ORLN 6540. Dissertation design

## development (3)

Professor Rigolosi. Permission required. Prerequisites: ORLN 4005, ORLN 5005, ORLN 5043, statistics, and certification. Required of all doctoral candidates. Group critique of dissertation proposals; focus on beginning to intermediate aspects of analysis of theory and research design. This course may be repeated as often as necessary until the student is ready for the departmental examination. Once ORLN 6540 is taken, continuous fall/spring enrollment in this course or in ORLN 8900 is required until the semester during which the departmental examination is held.

ORLN 6541. Advanced dissertation design development (3)
Professor Rigolosi. Permission required. Prerequisite: ORLN 6540 and certification. Focus on advanced aspects of research design and method.

## ORLN 6940. Independent study in

 nursing research (3-6)Faculty. Permission required. Allows student to contract with an individual faculty member for research-related work in a defined area of study, including dissertation development.

## ORLN 7500. Dissertation seminar in nursing (3)

Faculty. Permission required. Prerequisite: ORLN 6540 and certification. The departmental examination, involving presentation of dissertation proposal for faculty approval. This course is required of all certified doctoral candidates and may be taken only once. If the student is unable to satisfactorily complete the departmental examination during the semester in which enrolled, an incomplete is given.

ORLN 7900. Directed dissertation in research (3)
Faculty. Permission required. Prerequisites: ORLN 6540 and ORLN 6541. All doctoral students eligible for this course must register for this course during completion of the dissertation. This course may be repeated as often as necessary upon advice of the advisor.
ORLN 8900. Dissertation advisement in nursing (0)
Faculty. Individual advisement on doctoral dissertation following completion of all course work. Fee to equal 3 points at current tuition rate for each term. For continuous requirements, see section in catalog on Continuous Registration for Ed.D. degree.

## Role Preparation

The rest of the nursing courses focus on combining cognate and nursing knowledge in synthesizing knowledge needed in role fulfillment.

## Role Preparation Courses

ORLN 4013. Fiscal management of healthcare organizations (3)
Faculty. Focus is the fiscal impact of providing nursing services. Management information systems, organizing human and material resources, and assessing the cost and quality of nursing services are studied. Health organization finance and nursing budgeting are included.

ORLN 5010. Administration of a nursing organization (3)
Faculty. Prerequisite: ORL 4054. Analysis and application of administrative theory and structure to the nurse executive role. Analysis of fit of models to the nursing administrative task. Application of MBO quantitative decision theory, and other models in the nursing administrative function.

ORLN 5011. Designing, planning, and monitoring the healthcare system (3) Faculty. Prerequisite: ORL 4054. Corequisites or prerequisites: ORLN 4005, ORLN 4013, and ORLN 5010. Identification and analysis of organization and planning theories applicable to the nursing care system. Development of design models based on analyses of current and predictable healthcare needs of society and the nursing market. Ability to assess architectural plans as they impact on nursing care delivery.

ORLN 5013. Informatics in nursing (3) Faculty. Focus on computerized management information systems, computer-based analysis of decision alternatives, assessing nursing care quality and cost-effectiveness, and other feedback mechanisms specific to the nursing organization. Special fee: $\$ 50$.

ORLN 5212. Fieldwork in executive nursing management (3-6)
Faculty. Permission required. Open to only Ed.M. students. Observation, assessment, and evaluation of a preceptor nurse executive in a major nursing institution; concurrent assessment of the nursing organization. Specific objectives to be developed by student, faculty, and preceptor. Special fee: $\$ 25$.

## ORLN 5230. Fieldwork in nursing

 education (2-3)Faculty. Permission required. Supervised practice in teaching nurse learners in one or more settings: classroom, clinical, or practice.

ORLN 5530. Seminar: Clinical teaching and evaluation (3)
Faculty. Inquiry in effective strategies for teaching and evaluating students in the laboratory setting. Analysis, or theory and related research.

ORLN 5910. Independent study in nursing administration (1-6)
Faculty. Permission required. Individual, guided learning experience at the master's level in a selected aspect of nursing administration. Topic agreed upon between student and faculty.

ORLN 6014. Managing the socially responsible organization (3)
Faculty. Analysis of selected social, economic, and political megatrends that have or will continue to influence the direction of change in the healthcare industry. The process of analysis is intended to serve as a conceptual framework for the categorization of discrete trends affecting the management of nursing services and programs.

ORLN 6212. Advanced study in nursing administration (3-6)
Faculty. Permission required. Open only to doctoral candidates. Internship in a nursing organization as a nurse executive; involves active assumption of the executive role, including responsibility for assigned projects and organizational responsibilities. Specific objectives developed among student, faculty, and preceptor. Special fee: $\$ 25$.

## ORLN 6511. Innovations in nursing

 management (3)Faculty. Prerequisites: ORL 4054, ORLN 4011, ORLN 5010. Selected innovations in nursing, other health disciplines and management science are analyzed regarding underlying processes for translating new knowledge into successful practice. Special fee: $\$ 10$.

ORLN 6514. Marketing nursing programs and services (3)
Faculty. Prerequisites: ORL 4054, ORLN 5010. Analysis of marketing concepts and principles of strategic planning as they relate to nurse executive role in health service industry.

ORLN 6522. Policy formation and governance in healthcare (3)
Faculty. Policy formation and governance within nursing organizations and within the larger institution of which they are a part. Exploration of external and internal influences on policy formation in nursing.

## ORLN 6615. Colloquium in nursing

 administration (3)Faculty. Prerequisite: Determined by instructor based on subject to be covered. Examination of selected problems in nursing administration for in-depth coverage. Course may be repeated for credit if different topic is taken.

ORLN 6635. Colloquium in nursing education (3)
Faculty. Prerequisite: Determined by instructor based on topic selected. Examination of selected problems in nursing education practice and administration. Course may be repeated for credit if different topic covered.

ORLN 6910. Independent study in nursing administration (1-6)
Faculty. Permission required. Individual, guided learning experience at the doctoral level in a selected aspect of nursing administration. Topic agreed upon between student and faculty.

ORLN 6930. Independent study in nursing education (1-6)
Faculty. Permission required. Individual, guided learning experience at the doctoral level in a selected aspect of nursing education. Topic agreed upon between student and faculty.

## SOCIAL- <br> ORGANIZATIONAL PSYCHOLOGY

Program Coordinator:
Professor W. Warner Burke

Program Office: (212) 678-3249
Email: soc-org.psych@tc.edu
Website: www.tc.edu/o\&l/orgpsych/

## Degrees Offered:

PSYCHOLOGY: ORGANIZATIONAL (ORGM)
Master of Arts (M.A.)
PSYCHOLOGY: ORGANIZATIONAL
(EXECUTIVE MASTERS) (ORGX)
Master of Arts (M.A.)
SOCIAL-ORGANIZATIONAL PSYCHOLOGY (ORGD)
Doctor of Philosophy (Ph.D.)

## Program Description:

The Social-Organizational Psychology program is concerned with the various contexts (interpersonal, group, inter-group, and inter-organizational) in which human behavior occurs; the ways in which groups of individuals interact and influence these contexts; and how these interactions can be understood, studied, and modified through theory, research, and various types of interventions.

The programs provide advanced training in the concepts, research methods, and applications of social-organizational psychology. They are designed to prepare students to engage in research, consultation, and teaching in educational, business, governmental, and community organizations. Emphasis is placed on the acquisition of basic concepts and methods applicable to diverse institutional and organizational contexts.

Courses in these programs are supplemented by other programs and departments at Teachers College and Columbia University.

With the help of a faculty advisor, students select courses in their area of specialization, with consideration given to their academic backgrounds, work experiences, and career objectives.

Three programs are offered: a master's program in organizational psychology, an executive master's program in organizational psychology with a specialization in change leadership, and a Ph.D. program. A terminal M.A. degree in Psychology: Organizational is awarded upon successful completion of 45 points and passing the comprehensive examination, or in the case of the executive M.A. program, a Capstone Project. The Ph.D. degree is awarded upon completion of 86 points of planned and sequential study, qualifying papers, and a dissertation.

An advanced certificate in cooperation and conflict resolution approved by the New York State Education Department is also offered to students in the M.A.PPh.D. programs (also see non-credit program-certificate of completion in cooperation and in conflict resolution, below). Students interested in receiving the advanced certificate must complete a sequence of five courses and one semester of internship. Stu-dents who opt for the advanced certificate must complete an application form with the International Center for Cooperation and Conflict Resolution (ICCCR). Students in the M.A./Ph.D. program who wish to take a concentration of electives within the area of conflict resolution but do not wish to receive a formal graduate certificate may register for courses without completing an application form with ICCCR.

## Master of Arts in Organizational Psychology (ORGM)

The 45 -point M.A. program is designed to provide proficiency and advanced knowledge in the psychology of organizations. Qualified students are given the opportunity to develop their program in a manner consistent with their career interests, capacities, and background.

The program provides courses at Teachers College and other areas of Columbia University, particularly the Graduate School of Business. There is one major for the M.A. degree entitled Psychology: Organizational. Students may decide to pursue a broadly based program and therefore take a variety of courses, or they may concentrate their courses in a more specific area such as human resource management, organization change and consultation, or conflict resolution.

For a more comprehensive description of the M.A. program requirements, please see the M.A. program handbook, located on the Social-Organizational Psychology webpage: http://www.tc.edu/o\&l/orgpsych/

The program is designed to provide education leading to professional employment or to continuation of graduate work beyond the master's degree. Students are often employed in positions typically found within the personnel or human resource function of medium or largesize organizations. These include positions in global learning, career development and counseling, organizational effectiveness, personnel research, organization development and consultation, employee relations, talent management and human resource planning and strategy.

Graduates of the master's program may apply for admission to the doctoral program in Social-Organizational Psychology. However, successful performance in the M.A. program does not in and of itself guarantee admission. Students who apply become part of the applicant pool for that year and their qualifications are evaluated with equal standing along with the other applicants.

## Executive Masters Program in Change Leadership (ORGX)

Developed specifically for experienced working professionals, the Executive Masters Program in Change Leadership is designed to help individuals and organizations increase their capacity for initiating, managing and sustaining workplace change efforts in increasingly complex and global environments. Focusing on the application of both psychological and business principles to relevant real-world organizational challenges, the program emphasizes individual, team and organizational learning and transformation through rigorous training in and experience with applied research, reflective practice, and the use of theoretical models.

Executives enter the program each summer in small cohorts of 16-24 students and are trained by faculty experts in organization change and consultation using a range of innovative adult learning technologies and various cultural immersion and residential experiences in and around the New York City metropolitan area. The program is delivered in four 1 -week modules extending over one year and includes prework, post-work, and guided independent study/action research as part of the formal program requirements. Executives will learn about change-related topics at the societal, organizational, group, and individual levels and will be asked to integrate their own learning and professional development through various oppor-
tunities for practice and reflection. The program culminates in a 45 -credit Masters of Arts Degree in Organizational Psychology, with a specialization in Change Leadership.

For a more comprehensive description of the Executive Masters Program in Change Leadership, please visit www.tc.edu/leadchange.

## Doctor of Philosophy (ORGD)

The doctoral program in Social-Organizational psychology follows a scientist-practitioner model. It is designed for full-time graduate students who desire fundamental education and skill development in the science and application of psychology to social and organizational situations and activities. Our goal is to provide an environment that is conducive to the development of scientist-practitioners who are prepared to assume the diverse responsibilities of positions at research universities, leading businesses, and professional service firms. Through coursework, field projects with organizations, and close working relationships with faculty members and fellow graduate students, doctoral students are provided with advanced training in the theoretical concepts, research methods, and applications of socialorganizational psychology. Students gain critical knowledge and skills that encompass both research and practice.

Some unique aspects of the program include:

- The integration of both social and organizational psychology;
- A theoretical, research, and applied focus on understanding multiple levels of organizational functioning from individuals to groups to organizations as a whole and the dynamic interaction among these levels;
- A wide breadth of coverage including human resource management, organizational behavior, organizational change, leadership, conflict and negotiation, coaching, diversity, organizational demography, motivation, power and authority, group processes, and organizational dynamics;
- An emphasis on both quantitative and qualitative research methods to address organizational issues;
- Opportunities to engage in basic research, applied research, and organizational consulting and application activities; and
- Faculty members are trained in a broad array of disciplines including social psychology, counseling psychology, industrial-organizational psychology, organizational behavior, and business management- all of whom apply their respective disciplines to socialorganizational psychology issues.


## Special Application Requirements/Information:

## Master of Arts in Organizational Psychology

 (ORGM)The 45 -point M.A. program in Psychology: Organizational admits students for the fall, spring, and summer semesters. Persons from a variety of academic backgrounds and work experiences may qualify for admission to the program. Primary consideration for admission is given to previous academic record, work experiences, letters of reference, GRE scores, and the personal statement. The GRE General Test is required for M.A. applicants. In lieu of the GRE, applicants may submit GMAT scores. The early deadline for fall applications is January 15 th. The final deadline for fall applications is April 15th. Applicants may also apply to begin their studies in the spring. The deadline for spring applications is November 1st.

Executive Masters Program in Change Leadership (ORGX)
Individuals selected for the Executive Masters Program must have at least eight to ten years of work experience and must be able to demonstrate that continued education and training in change leadership would enhance their ability to work effectively in their formal organizational roles. Mid-career professionals and aspiring organizational leaders who wish to lead and manage future change efforts are especially encouraged to apply. Full-time employment, organizational sponsorship, two letters of reference, a personal statement, a current work product, an undergraduate transcript, and a recent resume are all required for admission.

Admissions decisions will be made on a rolling basis. Individuals who apply to the program are strongly encouraged to do so before the application deadline (visit www.tc.edu/leadchange for more information).

Students are admitted once annually. The program begins in late spring/early summer and concludes in May of the following year.

## Doctor of Philosophy (ORGD)

Applicants are considered once a year for the fall semester only. Completed applications with supporting documentation must be received no later than December 15. Late or incomplete applications will not be considered. In addition to the application, applicants must provide documents supporting previous academic record, professional resume, letters of reference, GRE scores, a writing sample, and a personal statement. It is recommended, but not required, that applicants also take the GRE Advanced Examination in psychology. The
writing sample must be a recently completed paper on a topic of interest to the applicant. This may be, but does not have to be, a paper submitted to satisfy course requirements for another academic program.

Admission to the doctoral program is highly competitive. Preference is given to candidates who possess excellent verbal and quantitative skills and whose transcripts, references, and previous work experience suggest that they have the potential to make a significant contribution to theory and practice, policy-making, and/or research. Please note that full-time study is required for the first and second years of study.

## Degree Requirements:

## Master of Arts In Organizational Psychology (ORGM)

The program curriculum is comprised of major courses consisting of four required core courses, five required advanced core courses, other General Elective courses (usually ORLJ, but can be outside ORLJ or at Columbia, SIPA, the Business School, etc.) and three Breadth Courses, which are Teachers College non-ORLJ courses taken for at least 2 points each, in related fields.

Courses available at the Graduate School of Business, Graduate School of Arts and Sciences, School of International and Public Affairs, Social Work, and in other graduate programs Columbia University may be taken. Students must consult with an advisor to select courses outside of Teachers College that may satisfy the elective/concentration requirements. An effort is made to assist students in developing a program of study that will best meet their personal career interests and objectives.

In addition, within the program, students may elect to concentrate in any one of three areas:

- Human resource management;
- Organization change and consultation; or
- Conflict resolution.

However, students are not required to choose a concentration. Thus, if a student desires a broadly based and general degree in organizational psychology, courses may then be selected, with the assistance of an advisor, across all three areas of concentration.

## Core Required Courses: Level 1

Regardless of concentration, the following four courses are required for all candidates.

- ORLJ 4002 Functions of organizations (3)
- ORLJ 4005 Organizational psychology (3)
- ORLJ 4009 Understanding behavioral

ORLJ research (3)

- ORLJ 5003 Human resource


## Advanced Core Required Courses:

 Level 2Regardless of concentration, the following three courses are required for all candidates, plus one of the application courses and one of the advanced theory courses, listed below, for a total of five courses:

- ORL 5362 Group dynamics: A systems
- ORLJ 5045 Organizational dynamics
- ORLJ 5148

> perspective (3) and theory (3) (prerequisite ORLJ 4005)
Managing conflict in organizations (3)

Plus one of the following application courses:

- ORLJ 5012 Organizational internship (1-3) (prerequisite ORLJ 4005)
- ORLJ 5340 Basic practicum in conflict resolution (3)
- ORLJ 6343 Practicum in change and consultation in organizations (4) (prerequisite ORL 5362, ORLJ 4005)

Plus one of the following advanced theory courses:

- ORLJ 5005 Leadership and supervision
- ORLJ 5046 Intercultural communications in organizational contexts:
Theory, issues, and practices (3)
- ORLJ 6040 Fundamentals of cooperation, conflict resolution, and mediation in different institutional contexts (3)


## Breadth Courses:

Three non-ORLJ courses of at least 2 points each taken at Teachers College. Please consult an advisor.

## Suggested Organizational Psychology General Elective/Concentration Courses:

The following courses are suggested General Electives within ORLJ. Students may choose from among these electives and other relevant electives that are not listed here (including courses at the Graduate School of Business, SIPA, etc.) upon consultation with an academic advisor.

- ORLJ 4010
- ORLJ 5005
- ORLJ 5012
- ORLJ 5017
- ORLJ 5018
- ORLJ 5019
- ORLJ 5199

Executive coaching (3) Leadership and
supervision (3)
Organizational
internship (1-3)
Small group interventions: Theory and method (3)
Using survey research in organizational consulting (3)
Data-based interventions in organizations (3) Special topics in organizational psychology (1-3)

- ORLJ 5046
- ORLJ 5047
- ORLJ 5310
- ORLJ 5311
- ORLJ 5312
- ORLJ 6048
- ORLJ 6343
- ORLJ 6350

Intercultural communications in organizational contexts: Theories, issues, and practices (3) Development of the multicultural self (3)
Preparation for coaching (3) Management and leadership practices (3)
Practices in HR management (3)

Teaching to cultural and cognitive complexities (2-3)
Practicum in change and consultation in organizations (4)
Advanced practicum in conflict resolution (3) (two terms)

## Internship

While not a prerequisite for graduation, an internship may be helpful for proper job placement. The purpose of the internship is to provide students with an opportunity to gain practical experience relevant to their interests and to apply the principles of organizational psychology theories to real-world situations. Students who are interested in doing an internship should consult with an academic advisor.

## Comprehensive Examination

The Comprehensive Examination may be taken after a student has completed the core level 1 courses receiving the grade of a $\mathrm{C}+$ or above. Students are encouraged to take the exam in their penultimate semester of the M.A. program.

A student must score $80 \%$ or above to pass the comprehensive examination. Should a student fail the examination twice, he/she will not be allowed to continue in the M.A. program.

## Executive Masters Program in Change Leadership (ORGX)

Executives enrolled in the program will be exposed to a change leadership curriculum that is both grounded in traditional psychological and business principles but also focused on working with and managing change in organizational environments of the future. Course content and learning objectives reflect professionally documented competencies essential for successful change leaders and are sequenced to emphasize the multi-level, complex nature of change in today's organizations. Executives will learn about change-related topics at the societal, organizational, group and individual levels and will be asked to integrate their own learning and professional development through action research projects, cultural immersion events, and participation in discussion-based
reflective practice courses. The curriculum for the Executive Masters Program is comprised of three components. Executives will enroll in 12 "core" courses that reflect the fundamental knowledge, skills and abilities required for leading organization change. These courses are sequenced across four Learning Modules, each of which focuses on a different aspect or level of change in organizations (e.g., system, group, individual).

In addition to the core, two "integrative" courses have also been developed to assist the translation and application of course concepts to the actual work environment, namely through action research and individual and group reflection. These integrative courses will span the length of the entire program and will have virtual components that occur in the liminal spaces between modules. A final course is comprised of attendance at and participation in four cultural events and spans the length of the program as well. All integrative and cultural experience courses are part of the formal curriculum and will be taken for credit.

## Capstone Project

Executives will be required to complete an action research project related to a change leadership challenge within their sponsoring organizations.

## Doctor of Philosophy (ORGD)

Students are required to take as many as 86 points for the Ph.D. (Occasionally, students may transfer credits- up to a maximum of 30 points from previous graduate training at other institutions. Transferring the maximum is unusual since courses transferred must be equivalent to courses that are required in the Ph.D. program.)

Students are encouraged to design an individually meaningful course of study within the larger offerings of the program. Opportunities for doing this are available through coursework, work with faculty members, independent research and study, and teaching activities. Students take a series of required courses that build a strong foundation in social-organizational psychology and can also select a series of more specialized courses depending on their specific areas of interest. Additional focus and expertise are developed through collaboration on major research projects with faculty members and practice-based or consulting activities under faculty supervision.

## Research Training

The research training for doctoral students involves acquiring an understanding of underlying concepts and theories in social and organizational psychology and gaining experience in conducting research in both field and laboratory
settings. The formal coursework provides a strong foundation in both social psychology and organizational psychology theories and their applications. A series of research methods courses provide the foundation necessary for understanding and conducting scholarly research. Similarly, a series of courses in measurement and statistics provides students with the strong statistical and analytical background necessary for the research process.

Research experience is gained through "workgroups." Workgroups are research teams led by a faculty member and consist of four to ten doctoral students. In workgroups, students participate in the design, execution, data analysis, and writing phases of research projects. All students are required to participate in workgroups each semester for the first four years. The commitment to research training is an important part of the program and consumes a significant amount of students' time.

## Applied Aspects of the Program

The applied aspects of the program for doctoral students involve the development of skills and knowledge in the application of theory and research to practice and consulting activities. As such, students acquire an understanding of the systems approach, in particular, the dynamic interaction among individuals, groups, organizations, and their environments as well as an understanding of organization development and the process of organization change. A variety of opportunities are available for students to develop skills in conducting applied and action research and in providing consultation to groups and organizations. All of these activities are grounded in theory and research in social-organizational psychology. A series of courses are available which provide students with basic skills in interpersonal relationships, interviewing and information gathering techniques, and process consultation. In addition, supervised field experiences are available whereby students engage in an applied project with a local organization under faculty direction. Internships and other work-related experiences are also examples of field experiences.

The Ph.D. Program in Social-Organizational Psychology is a scientist-practitioner program and as such focuses on both research and practice. The curriculum represents the dual emphasis of the program.

The following are six areas from which students select courses:

1. Research and Statistics
2. Theory and Practice in Social-

Organizational Psychology
3. Integrative Experiences
4. Breadth Requirement
5. Dissertation-related courses
6. Dissertation Advisement

Students take 30-32 required courses for a total of 86 points. Variable point courses should be taken for the minimum rather than the maximum number of points in order to have both the required number of points and the desired distribution of courses.

For a more comprehensive description of the Ph.D. program requirements, please see the Ph.D. program handbook, located on the Social-Organizational Psychology webpage: http://www.tc.edu/o\&l/orgpsych/. The handbook should be considered the primary document with regard to degree requirements for the Ph .D. program, including information on requirements for the two Qualifying Papers.

## Research and Statistics

(7 courses required)

| - ORLJ 5040 | Research methods in social psychology |
| :---: | :---: |
| - HUDM 4122 | Probability and statistical inference |
| - HUDM 5122 | Applied regression analysis |
| - HUDM 5123 | Linear models and experimental design |
| - HUDM 6122 | Multivariate analysis I |
| Plus two of the following: |  |
| - ORL 6500 | Qualitative research methods in organizations: Design and data collection |
| - ORL 6501 | Qualitative research methods in organizations: Data analysis and reporting |
| - ORLJ 5041 | Research methods in social psychology |
| - HUDM 5059 | Psychological measurement |
| - HUDM 5124 | Multidimensional scaling and clustering |
| - HUDM 6030 | Multilevel and longitudinal data analysis |
| - HUDM 6055 | Latent structure analysis |
| - HUDM 6123 | Multivariate analysis II |
| - ITSF 5000 | Methods of inquiry: |
|  | Ethnography and participant observation |

## Theory and Practice in SocialOrganizational Psychology (13 courses required)

Courses in this section are sub-divided into lecture, seminar, and practice courses. Of the thirteen required courses, there are seven courses that are set (four lecture courses, two seminars, and one practicum). The six remaining courses may be selected from among the optional courses as long as three of the six courses selected are seminars.

## LECTURE

Required:

- ORL 5362

Group dynamics:
A systems perspective

- ORLJ 4002 Functions of organizations
- ORLJ 5045 Organizational dynamics
- ORLJ 6040

Optional:

- ORLJ 5005
- ORLJ 5018
- ORLJ 5019
- ORLJ 5046
- HUDK 5198


## SEMINARS

Two required seminars:

- ORLJ 5540 Pro-seminar in social psychology
- ORLJ 5541 Pro-seminar in organizational psychology

Plus at least 3 of the following:

- ORLJ 5017 Small group intervention:
- ORL 5020 Theory and method
- ORLJ 5020

Special topics in social-

- ORLJ 5047 organizational psychology*

Development of the

- ORLJ 6045 Demography in organizations
*Doctoral seminars may be offered as special topics courses, pending permanent course approval. Such special topics seminars include: Organization change: Theory and practice, and Writing Seminar: Qualifying papers.


## PRACTICE

Required:

- ORLJ 6343

Practicum in change and consultation in organizations

Plus one of the following:

- ORLD 5055 Staff development and training
- ORLD 5061 The learning organization
- ORLJ 5310 Preparation for coaching
- ORLJ $5340 \quad$ Basic practicum in
- ORLJ 6244 Fieldwork in organizaFieldwork in organiz
tional consultation
- ORLJ 6349
- ORLJ 6350

Research workgroup in social-organizational psychol-
ogy: Group/organizational dynamics and diversity issues in organizations
Advanced practicum in conflict resolution

## Additional Course Requirements

(Three courses required)
Suggested courses include:

- ORLD 4051 How adults learn
- CCPJ 5020 Racism and racial identity in psychology and education
- CCPX 5034 Child developmental psychopathology
- CCPX 6352 Cognition, emotion, and health
- G 4230
- G 4630
- HUDK 5125
- HUDK 5023

Sensation and perception (Columbia University) Theories of personality (Columbia University)

- HUDK 5029 Personality development across the lifespan
- HUDM 5059 Psychological measure-
- ITSF 5013 ment
- ITSF 5013 Psychological anthropology

Dissertation-related courses:

- ORLJ 7501 Dissertation seminar (1-3)
- ORLJ 8900 Dissertation advisement in social-organizational psychology (0)


## Research Workgroups

Although the curriculum is designed to facilitate students' completion of all three qualifying papers and the preparation of a dissertation proposal while enrolled in workgroups for the first four years of the program, students may need to register for dissertation, related classes beyond their fourth year in the program. If so, there is a sequence of courses that vary in regard to course credit and fee. When actively working on the dissertation and meeting with one's Sponsor and/or committee, students are expected to register for ORLJ 7501 two semesters. This course is only offered for $1-3$ points and students can register for the minimum number of credits; it is offered for variable credit to accommodate the different needs of various students. Once the student has registered for two terms of ORLJ 7501, Ph.D. students are required to register for ORLJ 8900 for 0 points for every semester until completion of the final oral defense.

## Workgroups (See notes below)

- ORLJ 6340 Workgroup (2)
- ORLJ 6341 Workgroup (2)
- ORLJ 6342 Workgroup (2)
- ORLJ 6344 Workgroup (2)
- ORLJ 6345
- ORLJ 6346
- ORLJ 6347
- ORLJ 6348
- ORLJ 6349

Workgroup (2)
Workgroup (2)
Workgroup (2)
Workgroup (2)
Workgroup (2)

Notes:

1. One workgroup per semester for a minimum of eight semesters is required from the time a student enters the Ph.D. program.
2. Students must take six of the eight workgroups for credit points. An exception may be made for students who participated in a workgroup as a master's student in our program, in which case, the student must take a minimum of four of the eight workgroups for credit.
3. Workgroup points may not be substituted for required courses.
4. Students are required to actively engage in at least 2 different workgroups over the 8 semesters that workgroup is required.
5. Students are required to actively engage in workgroups. Active engagement means regular participation in the design and conduct of research until it reaches a conclusion. Solely being present at meetings does not satisfy the requirement.

## Integrative Experiences

- ORLJ 6640

Social-organizational psychology colloquium (0) (Attendance required for years 1-4)
Certification Examination in Psychology: The Research Methods Examination (RME) in Psychology is part of the certification process for doctoral students in all of the psychology programs at Teachers College. The examination measures student's knowledge in statistics, measurement, and research design and is developed by the Research Methods Examination Committee.

## The Dissertation

The doctoral dissertation is a report of independently conducted research. In formulating and conducting this research, the student has available as consultants and advisors two or three members of the faculty.

## Non-Credit Program-Certificate of Completion in Conflict Resolution

In addition to the degree programs previously described, the Social-Organizational Psychology Program, through the International Center for Cooperation and Conflict Resolution (ICCCR), offers professional development opportunities in the field of Conflict Resolution to people interested in continuing their graduate education.

Conflict Resolution is a concentration of graduate courses aimed at developing core competencies for reflective scholars and/or practitioners. It is offered both as a track in the Master of Arts and Doctoral Programs in Social Organizational Psychology and, in whole or in part, as a complement to the studies of students throughout the College, i.e. students may take conflict resolution courses as valid electives in their respective programs. By completing a
sequence of five courses and one semester of internship and formally applying to the Conflict Resolution Center certificate program, students may receive a non-credit Certificate of Completion in Cooperation and Conflict Resolution. The courses are offered in conjunction with the ICCCR whose mission is to help individuals, schools, communities, businesses and governments better understand the nature of conflict and how to achieve its constructive resolution. Contact: Professor Peter Coleman at (212) 678-3402.

## COURSES:

Courses at the 4000 -level do not require permission of the instructor and are open to nonmajors as well as majors. Many 5000 -level offerings are also open to non-majors with appropriate backgrounds; 6000-level courses are usually limited to majors with advanced standing in the program. See listings below for prerequisites and limitations on enrollment. In addition to the courses listed below, students should consult the offerings of other psychology programs at Teachers College, many of which are required or recommended in the various program guides which are obtainable from the respective offices.

## Social-Organizational Psychology

ORL 5362. Group dynamics:
A systems perspective (3)
Dr. Brazaitis. Enrollment limited. The course explores social processes in groups and their impact on individual behavior. In addition to a series of lectures/discussions, students are required to participate in an experiential group relations conference or to conduct a self-study project on group relations. Special fee.

ORLJ 4002. Functions of organizations (3) Mr. Buckner and Mr. Strong. A survey of the primary functions and operations of organizations: accounting, finance, marketing, strategic planning, management information systems, and the relation of these functions to human resource management.

ORLJ 4005. Organizational psychology (3) Faculty. Introduction to theories and research that underlie the field of organizational psychology. Implications and applications in various organizational contexts are considered.

ORLJ 4009. Understanding behavioral research (3)
Professor Perry and Dr. Buontempo. Overview of alternative methods of behavioral research and their relative strengths and limitations. Application of methodological principles in order to read and evaluate social science research and learn how to begin to conduct research.

ORLJ 4010. Executive coaching (3)
Professor Noumair.. This course is didactic in nature. The key concepts, theories, models, and processes underlying a successful and developmentally appropriate approach to coaching as a career option will be outlined. This is not a "how to" course. Core concepts include theories of adult development and learning, leadership development, psychological assessment and diagnosis, and a critical examination of the numerous definitions and models that define "coaching" today.

## ORLJ 5002. Advanced functions of organizations (3)

Mr. Buckner. Students will learn about the larger contexts within which businesses function, the mechanisms by which they are regulated, and the impact these variables have on the decision-making role and behavior of management and employees in an organization.

## ORLJ 5003. Human resource

 management (3)Dr. Bazigos. Current and emerging emphases in the management of human resources in organizations.

## ORLJ 5005. Leadership and supervision

 (3)Professor Burke. Major psychological and other interdisciplinary approaches to the study of leadership. Critical analysis of relevant theories, research, and practical applications.

ORLJ 5012. Organizational internship (1-3)

## ORLJ 5017. Small group intervention:

 Theory and method (3)Dr. Brazaitis. Prerequisite: ORL 5362. This course gives students an opportunity to develop a better understanding of the dynamics of small work groups and to learn intervention skills to improve group performance. The course covers relevant theory and research that underlies effective small group interventions. The class format will include lecture, discussion and inclass exercises.

ORLJ 5018. Using survey research in organizational consulting (3) Professor Westaby. Prerequisite: ORLJ 4009. This course illustrates how to conduct survey research for organizational change initiatives. The following topics are covered: entering into survey research consulting, selecting concepts, conducting focus groups, survey construction and administration, data analysis, identifying needs, survey feedback techniques, and final reports. Students develop a survey-based project from initial conceptualization to final report presentation.
ORLJ 5019. Data-based interventions in organizations (3)
Dr. Shmulyian and Dr. Tartell. Prerequisite: ORLJ 4009. Reviews tools for collecting, organizing, and analyzing qualitative and quantitative data in organizations. Students explore and
practice the use of data collection techniques most frequently utilized by practitioners in the field (secondary data, observations, questionnaires, interviews, and focus groups), as well as practice analysis techniques associated with these tools. The use of diagnostic tools is considered within the framework of the consulting cycle (contracting and planning, data collection, data analysis, and data feedback). Upon completion of this course, the students should be well prepared to engage in a consultation with the real client.

ORLJ 5040-ORLJ 5041. Research methods in social psychology (3)
Professor Block (ORLJ 5040) and Professor Westaby (ORLJ 5041). Open only to qualified doctoral students in the behavioral or social sciences. Representative approaches to practice in the design, conduct, and analysis of research. Fall: Experimental and quasi-experimental design. Spring: Field and survey methods; policy and evaluation research.

## ORLJ 5045. Organizational dynamics and theory (3)

Dr. Coruzzi. Prerequisite: ORLJ 4005 or equivalent. Study of organizations as total systems with consideration of different types of organizations. Emphasis on the impact of such dimensions as mission, strategy, structure, culture, systems, and leadership on individual and organizational performance and vice versa. Organizational change is also addressed.

ORLJ 5046. Intercultural communications in organizational contexts: Theory, issues, and practices (2-3)
Professor Knefelkamp. Dr. Beodeker. This class is designed to explore the intercultural communication field and what it has to offer professional educators in the context of their understanding of intercultural theory and practice and in their ability to design effective and empathic learning environments.

ORLJ 5047. Development of the multicultural self (3)
Professor Knefelkamp. This course focuses on issues of identity development, social and cultural diversity, and the intersections of multicultural aspects of the self in the context of the organization. Perspectives of social identity development, intellectual and ethical maturity, social learning theory, and intercultural analysis are major components in the study of the individual.

ORLJ 5115. Social networks and performance(3)
Professor Westaby. Grounded in psychology, social network analysis, and organizational science, this course shows how social networks influence performance in a variety of settings, such as social, organizational, educational, military, and international settings. Many topics relevant to social networks are explored, such as motivated goal pursuit, leadership, social networking, and group and organizational net-
works. The course also explains how dark networks function, such as terrorist cells, counterterrorism efforts, and bully networks. Students are interactively involved in the course.

ORLJ 5147. Conflict resolution in early childhood settings (2-3)
Faculty. This course introduces a developmentally appropriate model of working with conflict resolution in early childhood classrooms. It features demonstrations and practice in the use of circle time activities, puppets, role-playing, and modeling to promote social-emotional and problem-solving skills. Strategies for classroom management and parent involvement are highlighted.

ORLJ 5148. Managing conflicts in organizations (3)
Dr. Claudia Cohen and Faculty. Designed to address conflicts in the context of organizations from both theoretical and practical points of view. Review of the latest research findings about what causes conflict in organizations, how the issues are framed, how the conflicts are managed, and how conflict impacts the parties involved and the organization as a whole. Theories are applied in different types of activities such as analyzing case studies, participating in simulations, and designing conflict management systems. Students also engage in skill building activities, such as role plays, to better learn how to prevent conflicts from occurring and to intervene in conflicts that have developed.

ORLJ 5310. Preparation for coaching (3) Faculty. The purpose of this course is to introduce students to the basic structure and techniques of interviewing and listening. The course is largely experiential and is intended for students who have little or no background or experience in counseling or coaching.

ORLJ 5311. Management and leadership practices (1-3)
Dr. Temlock. Enrollment limited. This elective combines theory and practice in management and leadership, with an emphasis on practical applications- what managers and leaders actually do. In addition to theory, simulations, behavior modeling, team participation, and individual presentations are used to provide a series of developmental experiences.

## ORLJ 5312. Practices in HR management

 (3)Dr. Temlock. This elective course provides theory and practice in specific functions which are the responsibilities of Human Resource professionals. Simulations, role plays, mock employment interviews, case studies, consulting issues, and the construction and use of competencies are used to provide a series of developmental, skill building experiences. The course goals are built around enabling students to develop capabilities and have experiences which can be directly applied to the Human Resource positions they may some day occupy.

ORLJ 5340. Basic practicum in conflict resolution (1-3)
ICCCR Trainers. Enrollment limited. Students will be trained in the basic skills of collaborative negotiation and mediation and will have supervised practice in these skills.

ORLJ 5540-ORLJ 5541. Proseminar in social and organizational psychology (0-3) Professor Coleman (fall) and Professor Roberson (spring). Open only to qualified doctoral students in the behavioral or social sciences. Intensive readings and analysis of theories and research in social and organizational psychology and social structure.

ORLJ 6040. Fundamentals of cooperation, conflict resolution and mediation in different institutional contexts (3)
Professor Coleman. Topics such as cooperation and competition, trust and suspicion, bargaining and negotiation as they relate to conflict resolution in various contexts.

## ORLJ 6045. Demography in organizations

 (3)Professor Perry. This course seeks to understand the role that demography plays in organizations. The main focus in this course is on demographic variables such as race, gender, and disability. The course examines various theoretical frameworks that help us to understand how demographic variables influence organizational behavior and decisions.

ORLJ 6048. Teaching to cultural and cognitive complexities (2-3)
Professor Knefelkamp. This seminar focuses on issues of complex cognitive and cultural thinking and problem solving skills. Students gain knowledge about and exposure to a variety of assessment components and tools in the field of organization change and management.

ORLJ 6244. Fieldwork in organizational consulting (3)
Professors Burke and Noumair. Doctoral-level course, permission required. Prerequisites: ORLJ 5045 and ORLJ 6343. Background in organization development required. Students engage in consultation with a client that emphasizes data gathering, organization diagnosis, and feedback.

ORLJ 6340-6342, 6344-6349.
Research workgroup in socialorganizational psychology
Permission required. Limited to doctoral students. Topics are announced in the preliminary and final course schedules distributed each semester.

- ORLJ 6340. Multicultural self (1-3) Professor Knefelkamp.
- ORLJ 6341. Work/family issues (1-3) Faculty.
- ORLJ 6342. Multi-level research in organizations (1-3)
Professor Roberson.
- ORLJ 6344. Conflict, justice, and cooperation (1-3) Professor Coleman.
- ORLJ 6345. Diversity and discrimination in organizations (1-3) Professor Perry.
- ORLJ 6346. Organizational attitudes, job search, and career development (1-3) Professor Westaby.
- ORLJ 6347. Motivational issues in organizations (1-3) Professor Block.
- ORLJ 6348. Psychology of managerial and leadership competence and multirater feedback (1-3) Professor Burke.
- ORLJ 6349. Group/organizational dynamics and diversity issues in organizations (1-3)
Professor Noumair.
ORLJ 6343. Practicum in change and consultation in organizations (4) Professor Noumair and Dr. Tye. Permission required. Prerequisite: ORL 5362 and ORLJ 4005. Enrollment limited. Open to doctoral candidates and others who have a strong background in social science, organizational behavior, administration, psychology, or business. Planned change in organizations. Offers the opportunity to study and experience anticipated consultant roles during the entry, diagnostic, and intervention phases of efforts to effect change. Special fee.

ORLJ 6350. Advanced practicum in conflict resolution (3)
ICCCR Staff. Prerequisite: ORLJ 5340.
Limited enrollment. Students will engage in negotiation and mediation involving persons from different cultural contexts as well as with "difficult" cases.

ORLJ 6500. Stereotypes and stereotypic processes in organizational contexts (3) Professor Perry. Open only to qualified doctoral students in the behavioral or social sciences. This course seeks to understand how stereotypes are typically structured and operate, as well as the types of information they include. This course specifically considers the role of stereotypes and stereotypic processes in organizational contexts.

ORLJ 6640. Social-organizational psychology colloquium (0-1)
Faculty. Permission required. For doctoral candidates only. Discussion of ongoing projects involving research and consultation.

ORLJ 7501. Dissertation seminar (1-3) Faculty. Permission required. Development of doctoral dissertations and presentation of plans for approval. Registration limited to two terms. For requirements, see section on Continuous Registration for Ed.D./Ph.D. degrees.

## Independent Study and Research

Students may register for intensive individual study of a topic of special interest. Registration in independent study is by permission of the instructor under whose guidance the work will be undertaken. Credit may range from 1 to 3 points each term except for ORLJ 8900 (Dissertation Advisement) and registration is not limited to one term. Hours for individual conferences are to be arranged.

ORLJ 4901. Research and independent study in social-organizational psychology (1-3)
Faculty.
ORLJ 6901. Advanced research and independent study in social-organizational psychology (1-4)
Faculty.
ORLJ 8900. Dissertation advisement in social-organizational psychology (0)
Faculty. Fee to equal 3 points at current tuition rate for each term. For requirements, see section on Continuous Registration for Ed.D./Ph.D. degrees.

Teachers College degree programs have always provided a way for students to pursue formal study in a wide array of conventional disciplines. In addition, the College offers a number of non-degree programs and opportunities to explore a range of areas of interest that provide education in and out of the classroom and across the lifespan.

## CONFLICT RESOLUTION

Conflict Resolution is a concentration of courses aimed at developing core competencies for reflective scholars/practitioners. It is offered both as a track in the Master of Arts and Doctoral programs in Social-Organizational Psychology and, in whole or in part, as a complement to the studies of students throughout the College. The courses are offered by the International Center for Cooperation and Conflict Resolution (ICCCR), whose mission is to help individuals, schools, communities, businesses and governments better understand the nature of conflict and how to achieve its constructive resolution.

## Advanced Certificate in Cooperation and Conflict Resolution

Students interested in receiving an Advanced Certificate in Cooperation and Conflict Resolution must complete a sequence of six courses:

- ORLJ 5340

Basic practicum in conflict resolution and mediation
Fundamentals of coopera-

- ORLJ 6040
- ORLJ 6350
- ORLJ Elective
- ORLJ 5012 tion, conflict resolution and mediation in different institutional settings Advanced practicum in conflict resolution, Part I and II An ICCCR-sponsored elective course; electives vary semester to semester Organizational internship (in community mediation or an organizational setting)

For more information regarding graduate studies in cooperation and conflict resolution, visit our website: www.tc.edu/icccr. If you have questions, please contact the ICCCR office at (212) 678-3402, or email us: icccr@tc.edu.

Note: Students who take these courses on a non-credit basis will be awarded a Cooperation and Conflict Resolution Certificate of Completion.

## EDUCATION POLICY STUDIES

The breadth and depth of education policy studies at Teachers College is unmatched at any other school of education in the United States. Teachers College faculty who teach education policy courses include economists, lawyers, political scientists, psychologists, and sociologists as well as specialists in a wide range of interdisciplinary areas such as early childhood education, K-12 school reform, higher education policy, and law and education policy. Thus, policy courses and research at Teachers College are grounded in a full range of disciplinary and interdisciplinary perspectives.

Many education policy faculty members focus on the U.S., particularly the special challenges facing large cities, but we also have a very strong cadre with research and teaching interests in comparative and international education. Methodologically, we prepare students in quantitative, qualitative and mixed-methods approaches, and we encourage students to learn methods by doing original research of their own or through organized team projects. In addition to our emphasis on research and teaching, Teachers College policy faculty work closely with legislators, governors and other policy makers and provide opportunities for students to participate in this important work. Thus, through coursework, seminars and internship opportunities, Teachers College students can examine the politics of social and educational change, how policies should be evaluated, and how climates of support for policies are created.

Advancing both theoretical and applied dimensions of policy, our internationally renowned policy faculty teach courses, undertake path-breaking research, and help shape policy debates through their publications and commentary. TC students augment their theoretical training with fellowships, internships, colloquia, and policy student network activities. Some put their primary emphasis on studying education policy by enrolling in one of the degree programs that, beginning in Fall 2011, will be housed in the new Department of Education Policy and Social Analysis. Others concentrate their efforts on important issues dealt with in depth by other programs and sample selectively from the array of policyfocused courses and activities available to all students. Given the strength of faculty and students, and the unique opportunities offered, TC provides a dynamic policy experience.

From taking one or two policy courses to enrolling in one of the six policy related programs, students at Teachers College have a range of options when it comes to studying educational policy:

- Dabbling in Policy Study: Students enroll in individual policy courses that are open to everyone at Teachers College. The bulk of these courses are in the six policy programs; however, some are located in other programs, including Measurement and Special Education.
- College-wide Policy Activities: The Policy Student Network (PSN) is a student-run group which offers students an informal forum to share thoughts, policy experiences, internships and job opportunities, course advice, and recent work. The PSN regularly sponsors and organizes events for academic and professional advice and networking, and broadcasts opportunities for internships and jobs.

The Brown Bag Lunches are colloquia open to the Teachers College community and the broader New York education community. The colloquium series expands the education dialog at TC by introducing students to noted academics, researchers, and policymakers from across the country.

To find out about policy internships, students may sign up with TC Policy Connections. The goal is to connect students with "real world" experience and understanding of education policy through public, private, and non-profit organizations. In order to participate in the TC Policy Connections internship program you must have completed one graduate level policy course. For international and comparative education students, the requirement is one ITSF course. For more information about this opportunity, please visit the website at: http://www.tc.columbia.edu/edpolicy/:Info = Int ernships

- College-Wide Policy Concentration: (Nonprogrammatic Concentration offered through the Sociology and Education Program): Students from any program at Teachers College can enroll in a specified sequence of policy courses within the Sociology and Education Program (Department of Education Policy and Social Analysis) and complete a Policy Concentration (see description below).
- Policy-Related Programs: Students who want educational policy to be more central to their graduate studies can apply to one of six degree programs that weave many policy classes into their required curriculum. Four of these programs are housed in the newly created Department of Education Policy and Social Analysis:

Economics and Education
Leadership, Policy, and Politics
Politics and Education
Sociology and Education
Early Childhood Education is housed in the Department of Curriculum and Teaching.

International Educational Development is housed in the Department of International and Transcultural Studies.

Whether students are enrolled in a policy related program or interested in taking only one or two policy courses, the list of policy courses at Teachers College is long and impressive. For more information about the College-wide policy experience, please visit www.tc.edu/edpolicy.

## Policy-Related Programs and Concentrations at Teachers College

## Early Childhood Policy Concentration

Early Childhood Education: Within the Department of Curriculum and Teaching; at both the master's (Ed.M.) and doctoral level (Ed.D.), this program and its policy concentration provide students a firm grounding in early childhood pedagogy, programs, and practice as well as in policy analysis and policy making related to young children and their families. Students combine theoretical knowledge with practice in the policy field as they become familiar with an array of policy issues impacting contemporary child and family life.
Faculty Contact: Sharon Lynn Kagan;
sharon.kagan@columbia.edu
Website: www.tc.edu/academic/C\&T/Child-Ed

## Economics and Education Program

Within the Department of Education Policy and Social Analysis; this specialization equips masters' students with the skills required for the effective design and implementation of educational policy. The program and the policy specialization place strong emphasis on the financial, managerial, and policy challenges facing schools, colleges and other institutions at various levels of the educational system. This specialization enables students to learn the theories and methods of economics and apply them to a range of policy areas in education in domestic and international contexts. These areas include, for example, privatization and choice in education, financing and economic
evaluation in education, school-to-work transition, education and economic development, and the development of community colleges. Faculty Contact: Francisco Rivera-Batiz; flr9@columbia.edu
Website: www.tc.edu/epsa/Economics
Leadership, Policy and Politics Program
Within the Department of Education Policy and Social Analysis; this concentration develops students' skills in the political, economic and legal analysis of education policy issues, focusing on leadership roles. It prepares students for positions such as policy analyst, policy advocate/advisor, and educational researcher. LPP coursework includes research methods and policy-craft courses in which students write policy analyses for a variety of audiences. The culminating master's project involves writing a policy brief for a community-based, governmental, or private education agency on a topic of current importance. Faculty Contact: Luis Huerta, lah2013@columbia.edu; and,
Douglas Ready, ready@tc.edu
Website: www.tc.edu/epsa/LPP

## International Education

Policy Concentration
International Educational Development:
Within the Department of International and
Transcultural Studies; this concentration is interdisciplinary and encompasses a wide range of local and global perspectives in the field of international educational development. Courses are taught with attention to multiple paradigms and worldviews to prepare future scholars to engage in the work of policy analysis, formation, and study. Faculty who teach within this con-
centration come from a variety of academic disciplines across the College, such as anthropology, economics, law, political science, psychology, and sociology. Content areas covered in coursework include early childhood education, family and community education, public health, education leadership, and international educational development.
Faculty Contact: Gita Steiner-Khamsi; gs174@columbia.edu
Website: www.tc.edu/its/cie\&ied/

## Politics and Education Program

Politics and Education: Within the Department of Education Policy and Social Analysis; this concentration serves students who wish to study the ways governance institutions, political ideologies, and competing interests both within and outside of the education community influence the content, form, and functioning of schooling. Students study the ways power and politics affect and are affected by such issues as reform and innovation, centralization and decentralization within federal systems of gover-
nance, privatization and school choice, race and ethnicity, poverty and inequality, professionalization and bureaucratization, and testing and accountability.
Faculty Contact: Jeff Henig;
henig@tc.edu
Website: www.tc.edu/epsa/Politics

## Policy Studies Concentration

Sociology and Education: Within the Department of Education Policy and Social Analysis; this concentration serves students in the program as well as those in any other master's or doctoral programs across the College (see description of the College-wide Concentration above).

## Sociology and Education Program

The curriculum of the Sociology and Education program provides an analysis of educational issues and policies from a sociological perspective. Policy-related issues emphasized in coursework include the social organization of urban schools and school systems, and the success or failure of urban schools in meeting the educational needs of the diverse populations they serve. Program faculty are actively engaged in the analysis and evaluation of educational policies and programs designed to serve educationally disadvantaged populations, including school choice, school desegregation, school retention, school technology, and testing. Courses focus on the ways in which race, class and gender affect policy formation and how policy implementation is experienced by different policy targets at the street level.
Faculty Contact: Aaron Pallas;
amp155@columbia.edu
Website: www.tc.edu/epsa/Sociology
Graduates from our policy-related master's programs generally seek employment as legislative or gubernatorial staff or policy analysts and advisors in education advocacy organizations, education think tanks, or local, state, and federal education agencies. Graduates from our policy-related doctoral programs typically hold research or leadership positions in colleges and universities or serve as advisors to local, state or federal policy makers. Many lead or conduct research for policy think tanks or advocacy organizations.

## FAMILY AND COMMUNITY EDUCATION

Teachers College has long recognized that the family is a fundamental educational institution. Those concerned with education can benefit from considering how education proceeds within families, and how families are linked with other educational institutions in community
e.g. schools, daycare centers, health-care and social service agencies, the media, libraries and museums, parks, and religious institutions. Values, attitudes, norms, self-concepts, and expectations are formed, sustained, and modified in families as different generations teach and learn from each other through observation, participation, and instruction.

Families also mediate and thereby transform the influences of other educational institutions on their members. Since education takes place in a broad range of institutional and interpersonal settings, it is also important to understand how individuals engage in, move through, and combine these various educational experiences over a lifetime. Moreover, efforts to improve education often entail attempts to change families or their connections with other institutions. Thus, an understanding of families is significant for educational policy, practice, and research. Families are subject to numerous sources of change. The household composition, interpersonal relationships, and kin networks of the same family may change significantly from one stage of the life-cycle to another and in connection with geographic and social mobility. During periods of rapid demographic, economic, and technological change, it becomes especially important for educators to examine families, and to consider such issues as how new forms of transportation and communication technology are modifying information processing in family settings.

Given the complex connections of families with other institutions in the community, the variety of forms of the family in modern societies, and the numerous teaching and learning activities that take place in family settings, insights from a wide range of scholarly disciplines can be utilized in attempting to understand and help shape the educational role of modern families. Teachers College has a distinguished tradition of study and research on families and communities as educators.

The Elbenwood Center for the Study of the Family as Educator (Professor Hope Jensen Leichter, Director), The Institute for Urban and Minority Education, (Professor Edmund W. Gordon, Director), The Rita Gold Early Childhood Center (Prof. Susan Recchia, Faculty Director), the Center for Children and Families (Professors Sharon Lynn Kagan and Jeanne Brooks-Gunn, Co-Directors), and several departments within the college offer opportunities for study and research related to families. Additional opportunities for the Interdisciplinary Studies of families and communities as educators can be arranged with advisors.

Students interested in including elective studies in Family and Community Education in their degree programs should talk with Professor Hope Jensen Leichter. Other interested faculty members include: Professor Jeanne Brooks-Gunn Professor Celia Genishi
Professor Sharon L. Kagan
Professor Jo Anne Kleifgen Professor Michelle Knight-Diop
Professor Victoria J. Marsick
Professor Susan Recchia
Professor Hervé Varenne
Professor Barbara Wallace

## GENERAL OFFERINGS

## Master's and Doctoral Candidates

IND 4000. Masters candidate (0)
This course is open to all degree students in programs who need to maintain registration but are not registering for any courses in a given semester. Students should review their status with an advisor prior to registration. Registration is limited to four terms. Fee: current Teachers College fee.

IND 6000. Doctoral candidate (0)
This course is open to all degree students in doctoral programs who need to maintain registration but are not registering for any courses in a given semester. Students should review their status with an advisor prior to registration. Registration in this course does not satisfy a student's obligation for continuous doctoral dissertation registration. Registration is limited to six terms Fee: current Teachers College fee.

## INTERDISCIPLINARY STUDIES IN EDUCATION

Program Coordinator:
William J. Baldwin, Vice Provost
(Program Code: IDIS)

## Degrees Offered:

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
This program is designed for students who have interests in an area of specialization not offered at the College, but for which a coherent and integrated program may be developed through the selection of a combination of current course offerings from several different disciplines or programs at Teachers College.

Limited to areas of study at Teachers College, admission to the Interdisciplinary Studies in Education program is granted only if the designed program of study cannot be pursued
through one of the established areas of specialization, many of which have a sufficient degree of flexibility to permit an interdisciplinary approach to a field of study. All Teachers College professors are eligible to serve as advisors and the applicant is required to seek the support of a minimum of two advisors from the relevant disciplines represented in the proposed program of study as part of the application process. For the M.A. or Ed.M. degree a comprehensive examination, essay, or special integrative project is required.

Contact the Admission Office (212) 678-3710 for a more detailed description of the program and procedures for applying.

## LAW AND EDUCATIONAL INSTITUTIONS

In schools and postsecondary institutions, public and private, legal considerations play a central role in questions of educational governance, finance, curriculum, instruction, admission, staffing, accountability, equality of opportunity, and school reform. It is therefore important for administrators, policy makers, teachers, parents, and communities to understand law in its many forms - constitutional provisions, statutes, regulations, policies, court decisions, administrative regulations, and collective bargaining agreements, among others. There is also a growing need for effective collaboration between educators, lawyers, parents, and researchers; such collaboration not only helps avoid costly and divisive litigation but provides a powerful tool that can be used to advance important educational objectives.

This is not a degree program. Coursework in education law can be taken in connection with degree programs in most departments. For course descriptions, please see course listing in the Department of Education Policy and Social Analysis.

EDPA 4086. Law and education:
Regulation, religion, free speech, and safety (3)
Professor Heubert or Professor Sigall.
EDPA 5016. Educational equality:
The role of law (3)
Professor Heubert or Professor Sigall.
EDPA 4033. Equity, adequacy and leaving no child behind (3)
Professor Rebell.
EDPA 5880. School Law Institute (3) Professors Heubert, Sobol and Rebell and a national faculty.

## EDPA 5096. Introduction to

 special education law (3) Dr. O'Neill.For information about programs coordinated with the School of Law, contact Professor Jay P. Heubert, Advisor of Law and Educational Institutions at Teachers College via email at jay.heubert@columbia.edu.

## URBAN EDUCATION

Through its various departments and programs, Teachers College, located in the heart of one of the world's largest cities, has a wide range of opportunities for instruction, research, and service in the field of urban education. Individual programs of study can be arranged for students whose major interest is in this area- teaching, bilingual education, counseling, administration, supervision, special education, research, teacher education, and other professional roles. Special attention is given to prospective teachers and other school personnel; to persons with leadership responsibility for educational planning and program development; and to individuals interested in research and experimentation.

Most departments and programs at Teachers College give special attention to students primarily concerned with education in the urban setting. In addition to courses which focus primarily on urban education, many courses include attention to education in urban settings.

For study possibilities, students should contact the coordinator of the program in which their professional interests lie. The Ed.D. program in Curriculum and Teaching offers a concentration in Urban Education for those primarily concerned with instruction, whether in schools or in other educational environments.

Teachers College is also involved in educational program development and evaluation of urban programs. This research-service function is carried on with selected New York City schools and with other school systems in metropolitan areas.

Of particular interest in this regard is the Institute for Urban and Minority Education, which gives special emphasis to research, development, training and service programs designed to improve education in the nation's cities and for minority group members. The Institute investigates a wide range of factors that influence educational success and failure.

It provides technical assistance to schools; opportunities for students and faculty to engage in research and development activities; and, supervised and independent study jointly arranged between the Institute and appropriate academic departments.

For further information, address inquiries to the department chair of the area of specialization.

## GENERAL OFFERING

IND 4033. Problems and programs in urban education (2-3)
Knowledge, insights, and understandings emerging from theory, research, and practice, concerning urban education.

## Table of Program Codes 2011-2012

## PROGRAM OF STUDY

ADULT EDUCATION GUIDED INTENSIVE STUDY (AEGIS)
ADULT LEARNING AND LEADERSHIP
AFRICAN EDUCATION
ANTHROPOLOGY AND EDUCATION
CODE
DEGREE LEVEL

APPLIED ANTHROPOLOGY (WITH COLUMBIA UNIVERSITY
GRADUATE SCHOOL OF ARTS AND SCIENCES)
APPLIED EDUCATIONAL PSYCHOLOGY: COGNITIVE,
BEHAVIORAL, AND DEVELOPMENTAL ANALYSIS
APPLIED LINGUISTICS
APPLIED PHYSIOLOGY
APPLIED PHYSIOLOGY AND NUTRITION
APPLIED STATISTICS
ART AND ART EDUCATION
ART AND ART EDUCATION- INITIAL CERTIFICATION
ART AND ART EDUCATION- PROFESSIONAL CERTIFICATION
ARTS ADMINISTRATION
BEHAVIORAL NUTRITION
BILINGUAL/BICULTURAL EDUCATION
BILINGUAL/BICULTURAL CHILDHOOD EDUCATION- DUAL CERTIFICATION
BILINGUAL/BICULTURAL EDUCATION EXTENSION
BILINGUAL/BICULTURAL EDUCATION - INITIAL CERTIFICATION
BILINGUAL/BICULTURAL CHILDHOOD EDUCATION- TRANSITIONAL B CLINICAL PSYCHOLOGY
COGNITIVE STUDIES IN EDUCATION
COMMUNICATION
COMMUNITY NUTRITION EDUCATION
COMPARATIVE AND INTERNATIONAL EDUCATION
COMPUTING IN EDUCATION
COMPUTING IN EDUCATION- DISTANCE LEARNING
COOPERATION AND CONFLICT RESOLUTION
COUNSELING PSYCHOLOGY
CURRICULUM AND TEACHING
CURRICULUM AND TEACHING: ELEMENTARY EDUCATION. PROFESSIONAL CERTIFICATION
CURRICULUM AND TEACHING: SECONDARY EDUCATION. PROFESSIONAL CERTIFICATION
DESIGNING INTERACTIVE MULTIMEDIA INSTRUCTION
DEVELOPMENTAL PSYCHOLOGY
EARLY CHILDHOOD EDUCATION
EARLY CHILDHOOD EDUCATION- INITIAL CERTIFICATION
EARLY CHILDHOOD EDUCATION: SPECIAL EDUCATION
EARLY CHILDHOOD EDUCATION: SPECIAL EDUCATION. InITIAL CERTIFICATION

EARLY CHILDHOOD EDUCATION: SPECIAL EDUCATION-
initial dual certification
ECONOMICS AND EDUCATION
EDUCATIONAL LEADERSHIP
EDUCATION LEADERSHIP MANAGEMENT (M.B.A. THROUGH COLUMBIA UNIVERSITY GRADUATE SCHOOL OF BUSINESS)
EDUCATIONAL LEADERSHIP STUDIES
ELEMENTARY INCLUSIVE EDUCATION- INITIAL CERTIFICATION
ELEMENTARY INCLUSIVE EDUCATION- INITIAL DUAL CERTIFICATION

ECSE-INIT M.A.
AEGS
ADUL
AFRC
ANTH

ANTA

COGF Ed.M
LING
APHY
APPN
STAT
ARTE M.A., Ed.M., Ed.D., Ed.D.C.T.
ARTE-INIT M.A.
ARTE-PROF M.A.
AADM M.A.
NUBH Ph.D.
BILG M.A.
BILC-DUAL M.A.
BILG-INIT Adv. Cert.
BILG-INIT M.A.

BILC-TRAN M.A.
CLIN Ph.D.

COGN M.A., Ed.D., Ph.D.
TECM M.A., Ed.M., Ed.D.
NUTC Ed.M.
COMP M.A., Ed.M., Ed.D., Ph.D.
TECP M.A.
TECD M.A.
CCRE Adv. Cert.
COUN Ph.D.
CURR M.A., Ed.M., Ed.D.

CUED M.A.

CUSD M.A.
DLMM Adv. Cert.
DEVD Ph.D.

ECED M.A., Ed.M., Ed.D.
ECED-INIT M.A.
ECSE Ed.M.
ECSE-DUAL M.A.
ECON M.A., Ed.M., Ph.D.
ELSR Ph.D.

| ELMG | Ed.D. |
| :--- | :--- |
| ELSD | M.A., Ed.M., Ph.D. |
| ELEM-INIT | M.A. |
| ELEM-DUAL | M.A. |

## PROGRAM OF STUDY

ELEMENTARY INCLUSIVE EDUCATION- INITIAL CERTIFICATION WITH GIFTED EXTENSION

ENGLISH, TEACHING OF
ENGLISH, TEACHING OF- INITIAL CERTIFICATION
ENGLISH, TEACHING OF- PROFESSIONAL CERTIFICATION
ENGLISH, TEACHING OF- TRANSITIONAL B
ENGLISH EDUCATION
GIFTED EDUCATION
GIFTED EDUCATION - EXTENSION CERTIFICATION HEALTH EDUCATION

HIGHER AND POSTSECONDARY EDUCATION
HISTORY AND EDUCATION
INSTRUCTIONAL TECHNOLOGY AND MEDIA
INTERDISCIPLINARY STUDIES IN EDUCATION
INTERNATIONAL EDUCATIONAL DEVELOPMENT KINESIOLOGY

LEADERSHIP, POLICY AND POLITICS
LITERACY SPECIALIST- INITIAL CERTIFICATION
MATHEMATICS EDUCATION
MATHEMATICS EDUCATION- INITIAL CERTIFICATION
MATHEMATICS EDUCATION- PROFESSIONAL CERTIFICATION
MATHEMATICS EDUCATION- TRANSITIONAL B
MEASUREMENT AND EVALUATION
MENTAL HEALTH COUNSELING
MOTOR LEARNING
MOVEMENT SCIENCES AND EDUCATION
MUSIC AND MUSIC EDUCATION
MUSIC AND MUSIC EDUCATION - INITIAL CERTIFICATION
MUSIC AND MUSIC EDUCATION - PROFESSIONAL CERTIFICATION NEUROSCIENCE AND EDUCATION
NURSE EXECUTIVE (ACCELERATED PROGRAM)
NURSE EXECUTIVE (ACCELERATED PROGRAM)
NURSING EDUCATION: PROFESSORIAL ROLE
NURSING EDUCATION: PROFESSORIAL ROLE
(ACCELERATED PROGRAM)
NUTRITION AND PUBLIC HEALTH
NUTRITION EDUCATION
PHILOSOPHY AND EDUCATION
PHYSICAL EDUCATION
PHYSICAL EDUCATION - INITIAL CERTIFICATION
PHYSICAL EDUCATION- PROFESSIONAL CERTIFICATION
PHYSICAL EDUCATION, CURRICULUM AND TEACHING IN
POLITICS AND EDUCATION PRIVATE SCHOOL LEADERSHIP

PSYCHOLOGICAL COUNSELING
PSYCHOLOGY- DEVELOPMENTAL
PSYCHOLOGY- ORGANIZATIONAL
PSYCHOLOGY IN EDUCATION (PERSONALITY AND PSYCHOPATHOLOGY TRACK)

PSYCHOLOGY IN EDUCATION (GENERAL TRACK)
PUBLIC SCHOOL BUILDING LEADERSHIP
PUBLIC SCHOOL DISTRICT LEADERSHIP

## DEGREE LEVEL



## PROGRAM OF STUDY

READING SPECIALIST- INITIAL CERTIFICATION
SCHOOL COUNSELOR
SECONDARY INCLUSIVE EDUCATION
SOCIAL STUDIES, TEACHING OF
SOCIAL STUDIES, TEACHING OF- INITIAL CERTIFICATION
SOCIAL STUDIES, TEACHING OF- PROFESSIONAL CERTIFICATION
SOCIAL-ORGANIZATIONAL PSYCHOLOGY
SOCIOLOGY AND EDUCATION
SPEECH AND LANGUAGE PATHOLOGY
SPEECH AND LANGUAGE PATHOLOGY- INITIAL CERTIFICATION
SPEECH AND LANGUAGE PATHOLOGY- PROFESSIONAL CERTIFICATION
SPEECH AND LANGUAGE PATHOLOGY- BILINGUAL EXTENSION INSTITUTE
SPEECH AND LANGUAGE PATHOLOGY: BILINGUAL OPTION-
INITIAL CERTIFICATION
TEACHING AMERICAN SIGN LANGUAGE AS A FOREIGN LANGUAGEINITIAL CERTIFICATION

TEACHING AND LEARNING WITH TECHNOLOGY
TECHNOLOGY SPECIALIST: K-12- INITIAL CERTIFICATION
TESOL (TEACHING OF ENGLISH TO SPEAKERS OF OTHER LANGUAGES)
TESOL- INITIAL CERTIFICATION
TESOL- TRANSITIONAL B
TESOL JAPAN
URBAN EDUCATION LEADERS

## SCHOOL PSYCHOLOGY PROGRAMS

APPLIED DEVELOPMENTAL AND LEARNING PSYCHOLOGY: SCHOOL PSYCHOLOGY

APPLIED EDUCATIONAL PSYCHOLOGY: SCHOOL PSYCHOLOGY

## SCIENCE EDUCATION PROGRAMS

| BIOLOGY 7-12- INITIAL CERTIFICATION | SCIB-INIT | M.A. |
| :---: | :---: | :---: |
| BIOLOGY 7-12- TRANSITIONAL B | SCIB-TRAN | M.A. |
| CHEMISTRY 7-12-INITIAL CERTIFICATION | SCIC-INIT | M.A. |
| CHEMISTRY 7-12- TRANSITIONAL B | SCIC-TRAN | M.A. |
| EARTH SCIENCE 7-12- INITIAL CERTIFICATION | SCIE-INIT | M.A. |
| EARTH SCIENCE 7-12- TRANSITIONAL B | SCIE-TRAN | M.A. |
| PHYSICS 7-12- INITIAL CERTIFICATION | SCIP-INIT | M.A. |
| PHYSICS 7-12- TRANSITIONAL B | SCIP-TRAN | M.A. |
| SCIENCE EDUCATION | SCSD | Ed.D., Ph.D. |
| SUPERVISOR/TEACHER OF SCIENCE EDUCATION | SCSS | M.A. |
| TEACHER EDUCATION IN SCIENCE | SCTE | M.S., Ed.M. |
| SPECIAL EDUCATION PROGRAMS |  |  |
| ADMINISTRATION OF SPECIAL EDUCATION PROGRAMS | SEAD | Ed.D. |
| APPLIED BEHAVIOR ANALYSIS | ABAS | Ed.D., Ph.D. |
| APPLIED BEHAVIOR ANALYSIS- INITIAL DUAL CERTIFICATION | ABAS-DUAL | M.A. |
| BLINDNESS AND VISUAL IMPAIRMENT | BVIM | Ed.D. |
| BLINDNESS AND VISUAL IMPAIRMENT- INITIAL CERTIFICATION | BVIM-INIT | M.A., Ed.M. |
| BLINDNESS AND VISUAL IMPAIRMENT: ADOLESCENCE EDUCATION- |  |  |
| INITIAL DUAL CERTIFICATION | BVAI-DUAL | Ed.M. |
| BLINDNESS AND VISUAL IMPAIRMENT: CHILDHOOD EDUCATION- |  |  |
| INITIAL DUAL CERTIFICATION | BVCI-DUAL | Ed.M. |

BLINDNESS AND VISUAL IMPAIRMENT: EARLY CHILDHOOD EDUCATION-

| INITIAL DUAL CERTIFICATION | BVEI-DUAL | Ed.M. |
| :---: | :---: | :---: |
| CROSS-CATEGORICAL STUDIES | SECC | Ed.D. |
| DEAF AND HARD OF HEARING | DHEA | M.A., Ed.D. |
| DEAF AND HARD OF HEARING- INITIAL CERTIFICATION | DHEA-INIT | Ed.M. |
| DEAF AND HEARING IMPAIRED: ADOLESCENCE EDUCATION- |  |  |
| INITIAL DUAL CERTIFICATION | DHAE-DUAL | Ed.M. |
| DEAF AND HEARING IMPAIRED: EARLY CHILDHOOD EDUCATION- |  |  |
| INITIAL DUAL CERTIFICATION | DHEI-DUAL | Ed.M. |
| DEAF AND HEARING IMPAIRED: ELEMENTARY EDUCATION- |  |  |
| INITIAL DUAL CERTIFICATION | DHCI-DUAL | Ed.M. |
| DEAF EDUCATION/READING SPECIALIST- INITIAL DUAL CERTIFICATION | DHRI-DUAL | Ed.M. |
| GUIDANCE AND REHABILITATION | HABL | M.A. |
| INSTRUCTIONAL PRACTICE IN SPECIAL EDUCATION | INST | Ed.M. |
| INTELLECTUAL DISABILITY/AUTISM | ITDS | Ed.D., Ph.D. |
| INTELLECTUAL DISABILITY/AUTISM- INITIAL DUAL CERTIFICATION | ITDS-DUAL | M.A. |
| INTELLECTUAL DISABILITY/AUTISM: EARLY CHILDHOOD. |  |  |
| INITIAL DUAL CERTIFICATION | ITDE-DUAL | Ed.M. |
| INTELLECTUAL DISABILITY/AUTISM: CHILDHOOD ELEMENTARY- |  |  |
| INITIAL DUAL CERTIFICATION | ITDC-DUAL | Ed.M. |
| PHYSICAL DISABILITIES | PDIS | Ed.D., Ph.D. |
| RESEARCH IN SPECIAL EDUCATION | SERS | Ed.D. |
| SEVERE AND MULTIPLE DISABILITIES: ANNOTATION | MULT-ANOT | M.A. |
| SUPERVISION OF SPECIAL EDUCATION | SUPV | Ed.M. |

## KEY TO TEACHERS COLLEGE COURSE NUMBERS

COURSES THAT CROSS DISCIPLINES WITHIN A DEPARTMENT MAY USE THE THREE CHARACTER DEPARTMENTAL DESIGNATION ONLY, AS DO THE INTERDEPARTMENTAL AND THE CURRICULUM AND TEACHING COURSES.

THE NUMERIC PORTION OF THE COURSE NUMBER WILL REMAIN THE SAME.

THE FIRST DIGIT OF THE COURSE NUMBER INDICATES THE LEVEL AS FOLLOWS:

```
4 \text { INITIAL GRADUATE}
5 \text { INTERMEDIATE GRADUATE}
6 \text { ADVANCED GRADUATE}
7 \text { DISSERTATION SEMINAR}
8 DISSERTATION ADVISEMENT
9 POSTDOCTORAL
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THE SECOND DIGIT INDICATES TYPES OF OFFERING, AS FOLLOWS:

| 0 LECTURE | 5 SEMINAR |
| :--- | :--- |
| 1 LECTURE | 6 COLLOQUIUM |
| 2 FIELDWORK | 7 STUDENT TEACHING |
| 3 PRACTICUM | 8 WORKSHOP |
| 4 INTERNSHIP | 9 INDEPENDENT STUDY |

THE THIRD AND FOURTH DIGITS INDICATE INTERNAL PROGRAM AND COURSE IDENTIFICATIONS.


## Faculty Members

The following is a brief listing of current Teachers College faculty. For a complete listing and more detailed information, including profiles, selected publications, news, and photos, visit our website at http://www.tc.columbia.edu/faculty.

## Adriana Abdenur

Assistant Professor in International and Comparative Education
International and
Transcultural Studies

## Educational Background

A.B., Harvard University; M.A., Teachers College, Columbia University; Ph.D., Princeton University

## Harold F. Abeles

Professor of Music Education Arts and Humanities

## Educational Background

B.S., M.S., University of Connecticut; Ph.D., University of Maryland

## Scholarly Interests

Assessment in arts pedagogy. Assessment of arts partnership programs. Technology in music education. Research strategies in arts pedagogy.

## John P. Allegrante

Deputy Provost of Teachers College and Professor of Health Education Health and Behavior Studies

## Educational Background

B.S., State University of New York, Cortland; M.S., Ph.D., University of Illinois

## Scholarly Interests

Health behavior, disease selfmanagement, and health outcomes in chronic disease. Health education in schools and patientcare settings. Health promotion policy. Interdisciplinary applied behavioral research in clinical epidemiology and health services research. Public health education workforce development and continuing education.

## Randall Everett Allsup

Assistant Professor of
Music Education
Arts and Humanities

## Educational Background

B.M., Northwestern University; M.A., Ed.M., Ed.D., Teachers College, Columbia University

## Scholarly Interests

Instrumental Music Education, Teacher Education, Philosophies of Music and Arts Education, Classroom Creativity, Democratic Education, Social Justice and Equity, and Urban Education.

## O. Roger Anderson

Professor of Natural Sciences and Chair of the Department of Mathematics, Science, and Technology
Mathematics, Science, and Technology

## Educational Background

A.B., M.Ed., Ed.D., Washington University

## Scholarly Interests

Neurocognitive theory applied to science learning. Electron microscopic and physiological ecological studies of eukaryotic microbiota.

Laura Azzarito
Associate Professor of
Physical Education
Biobehavioral Sciences

## Educational Background

B.A., Universita' di Scienze

Motorie di Torino, Italy; M.A.,
University of Maryland; Ph.D.
Louisiana State University

## Thomas Bailey

George and Abby O'Neill Professor of Economics and Education, and Director of the Institute on Education and the Economy, the Community College Research Center, and the National Center for Postsecondary Research
Education Policy and
Social Analysis

## Educational Background

B.A., Harvard University; Ph.D., Massachusetts Institute of Technology

## Scholarly Interests

Labor economics, education policy, and community colleges.

Monisha Bajaj
Assistant Professor of Education International and
Transcultural Studies
Educational Background
B.A., M.A., Stanford University; Ed.D., Teachers College, Columbia University

## Scholarly Interests

Comparative and international education; peace education; human rights; politics of education; critical pedagogy; social inequalities in education; collective action; gender issues in education; sub-Saharan Africa, South Asia, Latin America and the Caribbean, and the United States.

William J. Baldwin
Vice Provost of Teachers College and Associate Professor of Higher Education
Organization and Leadership

## Educational Background

A.B., Villanova University; M.A., University of Toledo; Ed.M., Ed.D., Teachers College, Columbia University

## Scholarly Interests

College and university administration. Financing higher education. Technology in higher education. Institutional research and planning.

Lesley Bartlett
Associate Professor of Education International and Transcultural Studies

## Educational Background

B.A., Ph.D., University of North Carolina, Chapel Hill

## Scholarly Interests

Comparative and international education; anthropology of education; adult education; social theory; social studies of language, literacy, and cognition; multiliteracies; transnationalism; race and class formation; Latin America, the Caribbean, and the United States.

## Charles Basch

Richard March Hoe Professor of Health Education Health and Behavior Studies

## Educational Background

B.S., M.S., SUNY, Brockport;

Ph.D., Southern Illinois
University

## Scholarly Interests

Behavioral epidemiology. Health education program planning and evaluation. Urban and minority populations.

## John Black

Cleveland E. Dodge Professor of Telecommunications and Education and Chair of the Department of Human Development Human Development

## Educational Background

B.S., Massachusetts Institute of Technology; Ph.D., Stanford University

## Scholarly Interests

Cognitive and neural network models of understanding, learning and memory. Using cognitive and neural net models to design learning environments. Effects of using various technologies on cognition.

## Caryn Block

Associate Professor of Psychology and Education Organization and Leadership

## Educational Background

B.S., University of Illinois, Urbana; M.A., Ph.D., New York University

## Scholarly Interests

Diversity issues in organizations. Influence of racial identity in organizational contexts. Perceptions of affirmative action programs. Influence of sex role stereotypes on perceptions of men and women as managers. Organizational learning.

George Bonanno
Professor of Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., Hampshire College;

Ph.D., Yale University

## Scholarly Interests

Resilience and coping with grief and trauma. Emotion and emotion regulation. The adaptive consequences of self-deception.

## George Bond

William F. Russell Professor of Anthropology and Education and Chair of the Department of International and Transcultural Studies
International and
Transcultural Studies

## Educational Background

B.A., Boston University; M.A., Ph.D., London School of Economics

## Scholarly Interests

Education and elite formation in the United States and Africa. African studies. African religions and politics. Agrarian transformations. Cultural dimensions of urban and minority populations.

James Borland
Professor of Education
Curriculum and Teaching

## Educational Background

B.A., Johns Hopkins University; M.S., Clarion State College; Ph.D., Teachers College, Columbia University

## Scholarly Interests

Education of gifted students. Economically disadvantaged gifted students. Conceptions of giftedness.

Marla Brassard
Professor of Psychology and Education
Health and Behavior Studies

## Educational Background

B.A., Whitworth College;

Ph.D., Columbia University

## Scholarly Interests

Psychological maltreatmentits assessment, the emotional injuries and behavioral problems that result, and the contextual factors that moderate the effect of maltreatment, particularly the role of schools, teachers and peer relationships. Psycho-educational assessment of children with suspected disabilities.

## Melanie Elyse Brewster

Assistant Professor of
Counseling Psychology
Counseling and
Clinical Psychology

## Educational Background

B.A., B.S., M.S., Ph.D.,

University of Florida

## Scholarly Interests

Mental health correlates of heterosexism, sexism, racism and other forms of discrimination; intersections of personal identities (e.g., gender, race, religion, sexual orientation); instrument development and evaluation.

Alicia Broderick
Assistant Professor of Education
Curriculum and Teaching

## Educational Background

B.Phil., Miami University; M.S., Ph.D., Syracuse University

## Scholarly Interests

Disability studies in education (DSE), inclusive education, and particularly issues related to the inclusive education of students with labels of autism and others who experience difficulty with communication and movement.

Jeanne Brooks-Gunn
Virginia and Leonard Marx
Professor of Child and Parent
Development and Education
Human Development

## Educational Background

B.A., Connecticut College; M.Ed., Harvard University; Ph.D., University of Pennsylvania

## Scholarly Interests

Early childhood interventions and education. Adolescent transitions and development. Neighborhoods and Poverty. Growing up female. Child and family policy and programs.

John M. Broughton
Associate Professor of Psychology and Education Arts and Humanities

## Educational Background

B.A., M.A., Cambridge

University; Ph.D., Harvard University

## Scholarly Interests

Cultural studies and education. Youth subcultures. Cinema as educator. Extreme youth violence. Masculinity and war. Recovery from life-threatening illness and trauma.

## W. Warner Burke <br> Edward Lee Thorndike Professor of Psychology and Education, Coordinator, Program in SocialOrganizational Psychology and Chair of the Department of Organization and Leadership Organization and Leadership

## Educational Background

B.A., Furman University; M.A., Ph.D., University of Texas

## Scholarly Interests

Behavioral practices associated with superior leaders and managers and their performance.
Multirater feedback. Organizational culture. Inter-organizational relations. Empowerment in the workplace. Leading and managing organization change. Organizational diagnosis and change.

## Judith M. Burton

Professor of Art Education
Arts and Humanities

## Educational Background

National Diploma, Hornsey
College of Art, London; Academic Diploma, University of London; M.Ed., University of Manchester; Ed.D., Harvard University

## Scholarly Interests

Artistic-aesthetic development in children and adolescents. Learning, and transfer of learning in the arts. Instructional methods in the arts. Role of artists in the education of children. Cultural experiences in arts education.

## Lucy Calkins

Founding Director, Teachers College
Reading and Writing Project, and
The Robinson Professor in
Children's Literature
Curriculum and Teaching

## Educational Background

B.A., Williams College;
M.A., University of Hartford;

Ph.D., New York University

## Scholarly Interests

Teaching of Reading and Writing. Staff development, school reform, assessment, and comprehension.

Robert T. Carter
Professor of Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., Columbia University; Ed.M., M.A., Teachers College, Columbia University; Ph.D., University of Maryland

## Scholarly Interests

Issues of race, racial identity, and culture. Legal and mental health issues associated with stressful and potentially traumatic effects of discrimination (racial, gender etc.). Organizational development, mental health and health disparities, and educational equity.

## Madhabi Chatterji

Associate Professor of Measurement, Evaluation and Education and Director, Assessment and Evaluation Research Initiative (AERI)
Organization and Leadership

## Educational Background

B.Sc., University of Calcutta; M.Ed., University of Madras; Ph.D., University of South Florida

## Scholarly Interests

Assessment and evaluation methodology; Evidence standards and mixed-method designs for gathering scientific evidence on education/social interventions; Educational equity; Standardsbased educational reforms.

## Hsu-Min Chiang

Assistant Professor in
Autism Spectral Disorders
Health and Behavior Studies

## Educational Background

B.Ed., National Tainan Teachers College, Tainan, Taiwan; M.Ed., Monash University, Melbourne, Australia; Ph.D., Macquarie University, Sydney, Australia;

## Scholarly Interests

Communication skills, academic skills (reading and math), behavior problems, and cultural differences in individuals with autism as well as transition support services and teacher preparation for these individuals

## Peter Coleman

Associate Professor of Psychology and Education, and Director of International Center for Cooperation and Conflict Resolution (ICCCR)
Organization and Leadership

## Educational Background

B.A., University of Iowa; Ph.D., M.Phil., Teachers College, Columbia University

## Scholarly Interests

The conditions required for fostering constructive change in situations of protracted and intractable conflict. The psychological processes and social conditions which foster the use of constructive social power.

## Lambros Comitas

Gardner Cowles Professor of
Anthropology and Education
International and
Transcultural Studies

## Educational Background

A.B., Ph.D., Columbia University

## Scholarly Interests

Sociocultural change. Education in the developing world. Drugs and society. Caribbean. Latin America. Migration studies.

## Isobel Contento

Mary Swartz Rose Professor of Nutrition and Education Health and Behavior Studies

## Educational Background

B.Sc., University of Edinburgh;
M.A., Ph.D., University of California

## Scholarly Interests

Behavioral aspects of nutrition; use of psychosocial theory to study food choice, particularly in children and adolescents; development and evaluation of schoolbased curricula on food systems and food choice; obesity risk prevention through inquiry-based science and nutrition education that focuses on personal agency in environmental context; food and fitness policy.

James E. Corter
Professor of Statistics
and Education
Human Development

## Educational Background

B.A., University of North

Carolina; Ph.D., Stanford
University

## Scholarly Interests

Judgement and decision-making; risk attitudes. Clustering and scaling methods for multivariate data. Statistics expertise and probability problem-solving. Computational models of human learning and categorization.

## Regina Cortina

Associate Professor
of Education
International and
Transcultural Studies

## Educational Background

B.A., Universidad Iberoamericana, Mexico City; M.A., Ph.D., Stanford University

## Scholarly Interests

Comparative and international education; gender and education; the education and employment of teachers; public policy and education in Mexico; educational attainment among the poor in Latin America; the schooling of Latinos; Education in Latin America, the Caribbean and the United States.

## Lori Custodero

Associate Professor of
Music Education
Arts and Humanities

## Educational Background

Bachelor of Music, University of Redlands; M.A., California State University; D.M.A., University of Southern California

## Scholarly Interests

Music in the lives of young children and families. Contextual influences on music learning. Musical engagement and development.

Lawrence DeCarlo
Associate Professor of
Psychology and Education
Human Development

## Educational Background

B.A., Ph.D., SUNY at Stony

Brook; M.S., Columbia University

## Scholarly Interests

Statistical modeling of psychological processes, measurement, latent class analysis, categorical data analysis, structural equation modeling, multilevel and longitudinal data analysis, and item response theory.

Kevin Dougherty
Associate Professor of Higher Education and Senior Research Associate, Community College Research Center
Education Policy and
Social Analysis

## Educational Background

B.A., Washington University; M.A., Ph.D., Harvard University

## Scholarly Interests

The community college. Higher education policy and reform. Higher education finance. College students. K-12 educational reform. Sociology of education. Current research focus is the performance accountability movement in higher education. Previous research topics include: state policies affecting minority and low income student access to and success in community colleges, the historical origins and impact on students of community colleges, the role of higher education in economic development, and reform movements in elementary and secondary education.

## Eleanor Drago-Severson

Associate Professor of Education Organization and Leadership

## Educational Background

B.A., Long Island University; Ed.M., Ed.D., Harvard Graduate School of Education; Postdoctoral Fellowship, Harvard University

## Scholarly Interests

Leadership for adult learning and development. Supporting teachers, principals and other educational leaders in their professional development and growth in $\mathrm{K}-12$ schools and adult education settings (domestically and internationally). Adult learning and literacy. Enhancing doctoral research training. Qualitative research methodology.

## Steven Dubin

Professor of Arts Administration
Arts and Humanities

## Educational Background

M.A., Ph.D., University of Chicago

## Scholarly Interests

Sociology of art and culture; censorship and freedom of expression; museum studies; mass media and popular culture; collective memory; culture and politics of South Africa.

## Jessica Dudek

Assistant Professor of Psychology and Education Health and Behavior Studies

## Educational Background

B.A., William Smith College;
M.A., M.E., Teachers College;

Ph.D., Columbia University

## Katie Embree

Associate Vice Provost and
Assistant Professor of
Higher Education
Organization and Leadership

## Educational Background

B.A., Drew University;
M.B.A., Seton Hall University; Ed.D., Teachers College, Columbia University

## Scholarly Interests

For-profit higher education; women and college leadership.

## Christopher Emdin

Assistant Professor of
Science Education
Mathematics, Science, and Technology

## Educational Background

B.S., Lehman College, CUNY; M.S., Rensselaer Polytechnic Institute; M.Phil., Ph.D., The Graduate Center, CUNY

## Scholarly Interests

Utilizing sociocultural lenses to interrogate teaching and learning in urban science classrooms; using cosmopolitanism as a theory for transforming science classrooms; issues of race, class, and diversity in science and mathematics education; urban science education reform; hip-hop and the cultural studies of science education; and, student/teacher identity formation around science.

## Ansley Erickson

Assistant Professor of History
and Education
Arts and Humanities

## Educational Background

B.A., Brown University;
M.A., M.Phil., PhD., Columbia University

## Scholarly Interests

History of Education in the
United States; Educational Policy;
Educational Inequality; Urban and
Metropolitan History
Barry A. Farber
Professor of Psychology
and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., Queens College, CUNY;
M.A., Teachers College,

Columbia University;
Ph.D., Yale University

## Scholarly Interests

Psychotherapy research. Selfdisclosure in patients, therapists, and supervisees. Self-disclosure in children and adolescents. Internalization and representation in psychotherapy. Attachment theory.

Daniel Friedrich
Assistant Professor of Curriculum
Curriculum and Teaching

## Educational Background

B.A., Universidad Nacional de

Buenos Aires, Argentina; Ph.D.,
University of Wisconsin-Madison

## Scholarly Interests

Epistemological and philosophical questions, as they relate to the politics of schooling and of teacher education. Interdisciplinary, comparative and international perspectives, particularly with a focus in Latin America.

## Karen Froud

Associate Professor of Speech
and Language Pathology
Biobehavioral Sciences

## Educational Background

B.Sc., Central School of Speech and Drama; M.A., Ph.D., University College, London

## Scholarly Interests

Neuroimaging of language using metabolic and electromagnetic techniques; theoretical linguistic approaches to language disorder; brain function in aphasia, schizophrenia and other neurological disorders; morphology, the lexi-cal-functional distinction, and split intransitivity in human languages.

## Carol Ewing Garber

Associate Professor of Movement
Science and Education
Biobehavioral Sciences

## Educational Background

B.S., M.A., Ph.D., University of Connecticut

## Scholarly Interests

The role of physical activity in the prevention and treatment of chronic diseases. Community and clinical interventions to promote physical activity. Novel delivery systems for providing clinical exercise physiology interventions. Physical activity and aging.

## William Gaudelli

Associate Professor of
Social Studies and Education
Arts and Humanities

## Educational Background

B.A., Rutgers College;

Ed.D., Rutgers University

## Scholarly Interests

Global education, media texts as curriculum artifacts, curriculum theory/philosophy, building democratic classrooms.

## Celia Genishi

Professor of Education
Curriculum and Teaching

## Educational Background

B.A., Barnard College; M.A.T., Harvard University; Ph.D., University of California, Berkeley

## Scholarly Interests

Early childhood education. Language in the classroom. Qualitative research. Childhood bilingualism.

Maria Paula Ghiso
Assistant Professor of
Literacy Education
Curriculum and Teaching

## Educational Background

B.A., M.A., New York University School of Education; Ed.D., University of Pennsylvania

## Scholarly Interests

Young children's writing; critical literacies; multilingualism and immigrant identities; children's literature; university-school partnerships.

## Herbert Ginsburg

Jacob H. Schiff Foundations
Professor of Psychology and Education
Human Development

## Educational Background

B.A., Harvard University; M.S., Ph.D., University of North Carolina

## Scholarly Interests

Intellectual development; Mathematics education; Testing and assessment.

## A. Lin Goodwin

Professor of Education and Associate Dean of Teacher Education Curriculum and Teaching

## Educational Background

B.S., Central Connecticut State University; M.A., Ed.M., Ed.D., Teachers College, Columbia University

## Scholarly Interests

Teacher education for urban and multicultural contexts. Teacher beliefs. Equity education. Asian American educational experiences and identity development.

## Andrew Gordon

Professor of Movement
Sciences and Education
Biobehavioral Sciences

## Educational Background

B.A., Hampshire College; M.S., Pennsylvania State University; Ph.D., Karolinska Institute

## Scholarly Interests

The use of sensory information during the learning and control of well-learned manual skills (sensorimotor control). The biological basis of hand impairments in populations with movement disorders that disrupt sensorimotor control (e.g., children with early brain damage and adults with diseases of the basal ganglia). Rehabilitation and cerebral palsy.

## Peter Gordon

Associate Professor of Speech
Language Pathology
Biobehavioral Sciences
Educational Background
B.A., University of Stirling; Ph.D., Massachusetts Institute of Technology

## Scholarly Interests

Language acquisition and processing, Developmental Neuroscience of Language and Cognition, Cross-cultural studies of numerical cognition and linguistic knowledge. Infant event representations and verb argument structure, Behavioral Genetics of Language, Imaging of brain functioning in language processing.
R. Douglas Greer

Professor of Education and Psychology Health and Behavior Studies

## Educational Background

B.M.E., M.M.E., Florida State University; Ph.D., University of Michigan; CABAS® Senior Research Scientist, Fellow of the Association for Behavior Analysis

## Scholarly Interests

The identification and induction of verbal developmental capabilities and their relation to teaching and learning; comprehensive science based schools PreK through middle school (CABAS®); inducing and expanding observational learning; and, bridging the educational gap with scientifically replicable teaching.

George Gushue
Associate Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

A.B., Fordham University; Ph.D., Teachers College, Columbia University

## Scholarly Interests

The psychological impact of race/culture on social cognition (especially perception, judgment, memory, and attribution). Social cognitive factors in client evaluation, counseling practice, and career development. Health psychology. Group and family counseling. The psychosocial dimensions of HIV/AIDS.

## Zhao-Hong Han

Professor of Language
and Education
Arts and Humanities

## Educational Background

B.A., Central China Normal University; M.A., TESOL, Moray House Institute of Education, University of Edinburgh; Ph.D., Birkbeck College, University of London

## Scholarly Interests

Second language learnability. Second language teachability. Comparative grammar. Language typology. The interface of lexical semantics and syntax. Linguistic determinism. Second language reading processes.

## David T. Hansen

Professor of Philosophy
and Education
Arts and Humanities

## Educational Background

B.A., University of Chicago;
M.A., Stanford University;

Ph.D., University of Chicago

## Scholarly Interests

Philosophy of education.
Teaching and teacher education.
Moral and ethical issues in educational practice. Philosophical foundations of inquiry.

## Charles Harrington

Professor of Anthropology,
Psychology and Education
International and
Transcultural Studies

## Educational Background

A.B., Syracuse University; Ph.D., Harvard University

## Scholarly Interests

Human development in social and cultural contexts. The study of Pathmakers: Resiliency, resistance, invulnerability and success in at-risk populations. Psychological anthropology and education. Psychoanalytic anthropology.

## Thomas Hatch

Associate Professor of Education and Co-Director of NCREST
Curriculum and Teaching

## Educational Background

A.B., Brown University; Ed.D., Ed.M., Harvard Graduate School of Education

## Scholarly Interests

School reform; teaching and learning; teacher research; human development.

## Jeffrey Henig

Professor of Political Science and Education and Chair of the Department of Education Policy and Social Analysis Education Policy and Social Analysis

## Educational Background

B.A., Cornell University; Ph.D., Northwestern University

## Scholarly Interests

The boundary between private action and public action in addressing social problems. Privatization, race and urban politics, the politics of urban education reform, and school choice.

## Jay Heubert

Professor of Law and Education
Education Policy and
Social Analysis

## Educational Background

B.A., Swarthmore College; M.A.T., Duke University; J.D., Harvard Law School; Ed.D., Harvard Graduate School of Education

## Scholarly Interests

Legal and policy issues in education. Equal educational opportunity. High-stakes testing. Law and school reform. Interprofessional collaboration.

## Linda Hickson

Professor of Education
Health and Behavior Studies

## Educational Background

B.A., College of New Rochelle; M.A., Ph.D., George Peabody College, Vanderbilt University

## Scholarly Interests

Education of children, adolescents and adults with intellectual disabilities and autism. Cognitive, motivational, and emotional aspects of decision-making. Prevention of abuse and victimization. Transition to adulthood and community integration of individuals with developmental disabilities. Cognition, comprehension, and problem solving.

Jill S. Hill
Assistant Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., M.A., Loyola College in Maryland; Ph.D., University of Oklahoma

## Scholarly Interests

Culturally competent approaches to psychological assessment and intervention with Indigenous groups, with special emphasis on personality assessment. The impact of racial microaggressions on Indigenous Peoples. Culturally valid and ethical research methodologies.

## Marc L. Hill

Associate Professor of English and English Education
Arts and Humanities

## Educational Background

B.S., Temple University; Ph.D., University of Pennsylvania

## Scholarly Interests

Anthropology of Education.
African American Literacies.
Masculinity. Public and CounterPublic Pedagogy. Youth Cultural Studies. Neo-Liberalism. Globalization. Ethnographic Theory.

Olga Hubard
Assistant Professor
of Art Education
Arts and Humanities

## Educational Background

B.A., Universidad Iberoamericana; M.F.A., School of Visual Arts; M.A., Ed.D., Teachers College, Columbia University

## Scholarly Interests

The interaction of young people with artworks; the relationship of aesthetic theory and teaching practice; the relationship of the visual arts to other areas of the curriculum.

## Luis Huerta

Associate Professor of Education
Education Policy and
Social Analysis

## Educational Background

Ph.D., University of California, Berkeley

## Scholarly Interests

Education Policy, Decentralization in education, School choice, Privatization in education, School finance.

Thomas James
Provost and Dean of Teachers
College and Professor of
History and Education
Arts and Humanities

## Educational Background

B.A., Harvard University;
M.A., Ph.D., Stanford University

## Scholarly Interests

History of education; public policy and education; experiential learning.

## Mathew Johnson

Associate Professor of
Statistics and Education
Human Development

## Educational Background

B.S., Indiana University; M.S.,

Ph.D., Carnegie Mellon University

## Scholarly Interests

Educational and behavioral statistics, Bayesian statistics, categorical data analysis, item response theory.

Sharon Lynn Kagan
Virginia and Leonard Marx
Professor of Early Childhood and Family Policy and Co-Director, National Center for Children and Families
Education Policy and
Social Analysis

## Educational Background

B.A., University of Michigan; M.A., Johns Hopkins University; Ed.D., Teachers College, Columbia University

## Scholarly Interests

Application of child and parent development research to the formation and implementation of public policies; the impact of institutions on the development of low-income children.

## Pearl Rock Kane

The Klingenstein Family Professor
for the Advancement of Independent
School Education and Director,
Klingenstein Center
Organization and Leadership

## Educational Background

B.A., City College of New York; M.Ed., Smith College; Ed.D., Teachers College, Columbia University

## Scholarly Interests

Independent schools. Private school governance. School choice and privatization. Professional development of teachers and administrators.

## Alexander Karp

Associate Professor of Mathematics Education Mathematics, Science, and Technology

## Educational Background

B.A., M.A., Leningrad State Pedagogical University; M.A., Ph.D., St. Petersburg State Pedagogical University

## Scholarly Interests

Gifted education. Problem Solving. History of Mathematics Education.

## Richard Keller

Assistant Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.S., New York University;
M.Phil., Ph.D., Teachers College, Columbia University

## Scholarly Interests

Social justice, disability, employment and people with disabilities, self-disclosure, micro-aggressions.

Michael Kieffer
Assistant Professor of TESOL (PreK-12)
Arts and Humanities

## Educational Background

B.A., Stanford University; Ed.M., Ed.D., Harvard University

## Scholarly Interests

Second Language Literacy Development. Adolescent Literacy. English-as-a-SecondLanguage Instruction in Middle and High Schools. Reading Comprehension Difficulties in Adolescents. Second Language Vocabulary and Morphology. Content Area Learning for English-as-a-Second-Language Learners.

## Charles Kinzer

Professor of Education
Mathematics, Science, and Technology

## Educational Background

B.A., M.A., University of British Columbia; Ph.D., University of California

## Scholarly Interests

Literacy and technology, specifically: vocabulary development and reading comprehension; memory processes in reading and writing; models of reading and composing; and, computer, multimedia, and "future literacies."

## JoAnne Kleifgen

Professor of Linguistics
and Education
International and
Transcultural Studies

## Educational Background

B.A., Our Lady of the Lake of San Antonio; M.A., The University of Alabama; Ph.D., University of Illinois

## Scholarly Interests:

Discourse analysis. Language and literacy development of ethnolinguistic minorities. Computers and multimodal communication in schools, communities, and the workplace.

## Lee Knefelkamp

Professor of Psychology
and Education
Organization and Leadership
Educational Background
B.A., Macalester College;
M.A., Ph.D., University of Minnesota

## Scholarly Interests

Theories and concepts of intercultural communications. The multicultural self in organizations. Teaching to cognitive and cultural complexities in social-organizational psychology. The design of effective learning communities. Feminist pedagogy, theory, and research. Intellectual and ethical development. Diversity in the organizational context.

Michelle Knight-Diop
Associate Professor of Education Curriculum and Teaching

## Educational Background

B.A., Franklin and Marshall College; M.A., Monterey Institute of International Studies; Ph.D., University of California

## Scholarly Interests

Equity issues in urban education. Teacher education. Multicultural feminisms and feminist pedagogies. African-American and immigrant educators teaching practices with diverse populations.

## Robert Kretschmer

Associate Professor of
Psychology and Education
Health and Behavior Studies

## Educational Background

B.S., M.A., Northwestern University; Ph.D., University of Kansas

## Scholarly Interests

Teaching of the deaf and hard of hearing. Linguistics of English and ASL. Literacy development. Text structure. School psychology. Auditory streaming.

## Deanna Kuhn <br> Professor of Psychology <br> and Education <br> Human Development

## Educational Background

B.S., University of Illinois; Ph.D., University of California, Berkeley

## Scholarly Interests

Cognitive development across the lifespan and implications for educational theory and practice.

## Michael Y. Lau

Assistant Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., Grinnell College; M.A., Golden Gate University; M.A., Ph.D., University of Notre Dame

## Scholarly Interests

Research methodology,
Philosophical/Theoretical issues
in psychology, Asian/Asian-
American psychology.

## Megan Laverty

Associate Professor of
Philosophy and Education
Arts and Humanities

## Educational Background

M.A., University of Melbourne; Ph.D., University of New South Wales

## Scholarly Interests

The history of philosophy of education; moral philosophy and its relationship to education; philosophy of dialogue and dialogical pedagogy; and practicing philosophy with children and adolescents in schools.

## Joey Lee

Assistant Professor of Communication, Computing, and Technology in Education Mathematics, Science, and Technology

## Educational Background

B.S., Ph.D., Pennsylvania State University

## Scholarly Interests

Identity; serious games, social impact games, games for change; video games as designed experiences and spaces for learning; collaborative virtual environments; using technology to deliver experiences that empower people, or overcome negative stereotypes/other barriers to learning; design and humancomputer interaction.

## Young-Sun Lee

Associate Professor of
Psychology and Education
Human Development

## Educational Background

B.A., M.A., Ewha Womans

University, Seoul, South Korea; Ph.D., University of WisconsinMadison

## Scholarly Interests

Psychometrics, Classical Test Theory and Item Response Theory; Educational and Psychological Measurement; and Applied Statistics.

## Hope Leichter

Elbenwood Professor of Education and Director of the Elbenwood Center for the Study of the
Family as Educator
International and
Transcultural Studies

## Educational Background

A.B., Oberlin College; Ph.D., Harvard University

## Scholarly Interests

Families and communities as educators. Family memories and narratives. Kinship networks and grandparents as educators. The mediation of television by the family. Education in community settings: museums, libraries. Families and school reform. Immigration, migration and family education.

## Nancy Lesko

Maxine Greene Professor of Distinguished Contributions to Education
Curriculum and Teaching
Educational Background
B.S., Georgetown University; M.S., Ph.D., University of Wisconsin-Madison

## Scholarly Interests

Curriculum theory and history. Conceptions of children and youth in theory and practice. Gender issues in education. Citizenship education in times of war.

## Henry Levin

William Heard Kilpatrick Professor of Economics and Education and Director, National Center for the Study of Privatization in Education (NCSPE) and Co-Director, Center for the Study of Benefit-Cost
Studies in Education (CSBCE)
Education Policy and Social Analysis

## Educational Background

B.S., New York University; M.A., Ph.D., Rutgers University

## Scholarly Interests

Economics of education. Costeffectiveness analysis. School reform. Educational vouchers.

## Erika Levy

Assistant Professor of
Speech and Language Pathology Biobehavioral Sciences

## Educational Background

B.A., Wesleyan University;
M.A., Lehman College;
M.A., New York University; Ph.D., CUNY Graduate Center

## Scholarly Interests

Cross-language speech production and perception, second-language speech learning, communication disorders in bilinguals, accent and intelligibility in speech-language pathology.

## Xiaodong Lin

Associate Professor of
Technology and Education
Mathematics, Science, and Technology

## Educational Background

B.A., HeNan University (China); M.A., Louisana State University; Ph.D., Purdue University

## Scholarly Interests

Metacognition and problem solving; technology-mediated cultural interactions and their impact on teacher professional development and reflection, and student domain subject understanding; influence of technology-rich learning environments on lesson development; transcultural collaboration among teachers and students.

## SUNIYA LUTHAR

Professor of Psychology
and Education
Counseling and
Clinical Psychology

## Educational Background

B.Sc., M.Sc., Delhi University; Ph.D., Yale University

## Scholarly Interests

Developmental psychopathology and resilience among children and families at risk.

Georgia Malandraki
Assistant Professor of Speech and Language Pathology and Director of Swallowing, Voice and Neuroimaging Laboratory (SVN)
Biobehavioral Sciences

## Educational Background

B.S., Technological Educational Institute of Patras, Greece; M.A, Ohio University; Ph.D., University of Illinois at UrbanaChampaign

## Scholarly Interests

Swallowing physiology and disorders (dysphagia) across the lifespan; enhancing diagnostic and therapeutic procedures. Neuroimaging applications in the study of swallowing and voice; use of MRI and MRI methodologies. Intervention related neuroplasticity in patient populations. Telemedicine applications in the evaluation and treatment of dysphagia. Relationships between voice and swallowing

## Anand Marri

Associate Professor of
Social Studies and Education
Arts and Humanities

## Educational Background

A.B., Bowdoin College;
A.M., Stanford University; Ph.D., University of WisconsinMadison

## Scholarly Interests

Civic Education, Economics Education, Teacher Education, Multicultural Education and Social Studies Education.

## Victoria Marsick

Professor of Education and CoDirector, The J.M. Huber Institute for Learning in Organizations Organization and Leadership

## Educational Background

B.A., Notre Dame University; M.I.P.A., Maxwell School; Ph.D., University of California at Berkeley

## Scholarly Interests

Informal workplace learning; team learning; action learning; strategic organizational learning and knowledge management. Learning organizations. International models of management.

Carmen Martínez-Roldán
Associate Professor of Bilingual/Bicultural Education
Arts and Humanities

## Educational Background

B.A., M.A., University of Puerto Rico; Ph.D., The University of Arizona, Tucson, Arizona

## Scholarly Interests

Latino students' literacy/biliteracy development; Latino/a literature for children and adolescents; computer-mediated learning and young childrens' biliteracy, immigrant childrens' education and literacy development; sociocultural theories of learning.

## Tara L. McIsaac

Assistant Professor of Movement
Sciences and Education
Biobehavioral Sciences
Educational Background
B.A., University of WisconsinLaCrosse; Ph.D., University of Arizona

## Scholarly Interests

Neurophysiology and motor learning. Attentional and instructional factors in motor learning after neurological injury. Motor skill acquisition of dual-task activities. Rehabilitation of individuals with movement disorders.

## Ellen Meier

Associate Professor of Practice in Computing and Education Mathematics, Science, and Technology

## Educational Background

B.A., University of Iowa;
M.A., University of Minnesota;

Ed.D., Teachers College, Columbia University

## Scholarly Interests

Technology policy and practice; school reform and the use of technology, with particular emphasis on urban schools; role of leadership in technology integration, curriculum design and teaching with technology, technology and organizational change.

## Elizabeth Midlarsky

Professor of Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., Brooklyn College, CUNY; M.A., Ph.D., Northwestern University

## Scholarly Interests

Altruism and religiousness through the lifespan. Violence and mental health. Aging and gender issues. Families of people with disabilities. Predictions of psychotherapy utilization in white and ethnic minority populations.

## Janet L. Miller

Professor of English Education Arts and Humanities

## Educational Background

A.B., Grove City College; M.A., University of Rochester; Ph.D., The Ohio State University

## Scholarly Interests

Curriculum theory, with emphases on feminist poststructuralist and autobiographical theorizing; Qualitative/narrative research theories and methodologies; Issues of representation in qualitative/narrative research, especially in relation to constructions of teachers' and researchers' identities.

## Lisa Miller

Associate Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., Yale College; Ph.D.,

University of Pennsylvania

## Scholarly Interests

Religion \& spirituality, depression and substance abuse, related risk factors and protective factors.

Marie L. Miville
Associate Professor of
Psychology and Education and
Chair of the Department of
Counseling and
Clinical Psychology
Counseling and
Clinical Psychology

## Educational Background

B.S., University of Florida;
M.A., Ph.D., University of

Maryland at College Park

## Scholarly Interests

Multicultural counseling.
Latino/a mental health issues. Universal-diverse orientation. Social attitudes and identity development. Intersections of identities. Supervision, training, and consultation. Professional and student development.

Felicia Moore Mensah
Associate Professor of
Science Education
Mathematics, Science,
and Technology

## Educational Background

B.S., University of North Carolina at Chapel Hill; M.S., North Carolina Agricultural and Technical State University; Ph.D., Florida State University

## Scholarly Interests

Urban \& Multicultural Education. Teacher Education/Teacher Professional Development. Qualitative Research Methods. Critical Theory. Feminist Poststructuralist Theory.

## Ernest Morrell

Professor of Education and
Director of the Institute for
Urban and Minority Education
Arts and Humanities

## Educational Background

B.A., University of California at Santa Barbara; M.A., Ph.D., University of California at Berkeley

## Scholarly Interests

Discourse of popular culture; adolescent literacy practices in non-school settings; critical literacy education; and urban teacher development.

## Srikala Naraian

Assistant Professor of Education
Curriculum and Teaching

## Educational Background

B.A., Madras University; M.A., Michigan State University;

Ph.D., University of Missouri-
St. Louis

## Scholarly Interests

Disability Studies in Education. Inclusive schooling; education of students with significant disabilities. Sociocultural theories of learning. Interpretive research in education.

## Gary Natriello

Ruth L. Gottesman Professor of Educational Research
Human Development

## Educational Background

A.B., Princeton University;
A.M., Ph.D., Stanford University

## Scholarly Interests

Social organization of online learning. Social dimensions of performance assessment. School and classroom organization. Schooling for at-risk youth.

## Anna Neumann

Professor of Higher Education Organization and Leadership

## Educational Background

B.A., University of Texas, Austin; M.A., University of Texas at Pan American; Ph.D., University of Michigan, Ann Arbor

## Scholarly Interests

Scholarly learning in lifespan perspective. Professors and their intellectual careers. Learning and teaching in higher education. Women's scholarly development. Academic cultures. Qualitative research methodology, interview research methods. The learning of research.

## Debra Noumair

Associate Professor of Psychology and Education
Organization and Leadership

## Educational Background

B.S., Boston University;

Ed.M., Ed.D., Teachers College, Columbia University

## Scholarly Interests

Group and organizational dynamics and the application of systems thinking to individual, team, and organizational performance. Examining the influence of diversity and authority on leadership and followership behavior in groups, organizations, institutions, and society.

Kathleen O'Connell
Isabel Maitland Stewart Professor of Nursing Education
Health and Behavior Studies

## Educational Background

B.S.N., College of Mount St. Joseph-on-the-Ohio; M.A., Ph.D., University of Kansas

## Scholarly Interests

Smoking cessation, health behaviors, diabetes, nursing, reversal theory, theory of self-control strength.

## Sandra Okita

Assistant Professor of
Technology and Education
Mathematics, Science, and Technology

## Educational Background

B.A., M.A., Ph.D. Keio University, Japan; M.A., Ph.D. Stanford University

## Scholarly Interests

Mixed-reality and learning, to design technology assisted learning and intervention in formal and informal settings. Children's interpretation and conceptual development in relation to technological boundary objects (lifelike robots, Agents-Avatars). Theoretical research interest areas: Self-other monitoring, learning by teaching, learning by observation and its influence on behavior in the domain of biology, math, and agency.

## Honor O'Malley

Associate Professor of Audiology Biobehavioral Sciences

## Educational Background

 B.A., Marymount Manhattan College; M.S., Ph.D., Purdue University
## Scholarly Interests

Function of the normal ear. Psychoacoustics and auditory physiology. Intraoperative monitoring of hearing during neurotologic surgery.

## Cella Oyler

Associate Professor of Education Curriculum and Teaching

## Educational Background

B.S., Southern Connecticut State College; M.Ed., University of Vermont; Ph.D., University of Illinois, Chicago

## Scholarly Interests

Classroom-based collaborative research on issues of social justice, equity, and accessible pedagogy. Inclusion of students with disabilities in general education classrooms.

## Aaron Pallas

Professor of Sociology
and Education
Education Policy and
Social Analysis

## Educational Background

B.A., University of Virginia; Ph.D., Johns Hopkins University

## Scholarly Interests

Educational stratification, sociology of the life course, school effects and effectiveness, and social organization of schools.

## Dolores Perin

Professor of Psychology
and Education
Health and Behavior Studies

## Educational Background

B.A., Ph.D., University of Sussex

## Scholarly Interests

Reading and writing in children, adolescents and adults with literacy difficulties. Academic preparedness of community college developmental education students. Teacher preparation for disciplinary literacy in middle and high schools. Reading and writing interventions for adolescents and adults.

## Elissa Perry

Associate Professor of Psychology and Education Organization and Leadership

## Educational Background

B.S., Trinity College; M.S., Ph.D., Carnegie Mellon University

## Scholarly Interests

The role of personal characteristics (e.g., age, gender, race, disability) in human resource judgments and organizational behavior with a particular interest in issues of age discrimination. Sexual harassment including sexual harassment awareness training. Social cognitive processes in organizational decision making.

Stephen Peverly
Professor of Psychology and Education and Chair of the Department of Health and Behavior Studies
Health and Behavior Studies

## Educational Background

B.A., Manhattan College; M.S., Ed.S., SUNY, Albany; Ph.D., Pennsylvania State University

## Scholarly Interests

His research focuses on two areas: a) the cognitive processes that underlie reading comprehension and studying, and b) crosscultural differences bet-ween U.S. and Chinese children in mathematical performance and the reasons for differences in performance. He teaches courses on memory, reading comprehension and studying, and law and ethics for school psychologists.

Lenore M. Pogonowski
Associate Professor of
Music Education
Arts and Humanities

## Educational Background

B.S., Western Connecticut State University; M.A., University of Connecticut; D.M.A., (Doctor of Musical Arts), Temple University

## Scholarly Interests

Development of musicality. Musical creativity and problem solving. Metacognition. Interdisciplinary arts education. Contextual Teaching and Learning Music. Creative Arts Laboratory.

## James E. Purpura

Associate Professor of Linguistics and Education and Director of TESOL and Applied Linguistics Programs
Arts and Humanities

## Educational Background

B.A., Marietta College; M.A., University of Colorado; Ph.D., University of California, Los Angeles

## Scholarly Interests

Second and foreign language assessment; Language Program Evaluation; Assessment of Grammatical Ability; Cognitive Dimensions of L2 Assessments, Classroom-Based Language Assessment.

## Molly Quinn

Associate Professor of Education Curriculum and Teaching

## Educational Background

B.A., Ph.D., Louisiana State University

## Scholarly Interests

Curriculum theory and history (i.e., hermeneutic, phenomenological, post-structural). Teaching and pedagogy in the humanities (i.e., aesthetics, autobiography, dialogic criticism). Engage 'spiritual' (ethical) and philosophical (theoretical) inquiry and criticism toward embracing a vision of education that cultivates wholeness, beauty, compassion and social action. Recent scholarly efforts include: 1) the question of hospitality in our educational labors via Derrida's critical inquiry and concern for the 'foreigner', 2) cosmopolitanism as counter-narrative to multiculturalism in curriculum thought and practice, and 3) curriculum, subjectivity and the subject of justice.

## Douglas David Ready

Assistant Professor of Education
Education Policy and
Social Analysis

## Educational Background

B.M.Ed., Ohio State University; M.M., University of Rochester; M.Ed., University of Virginia; Ph.D., University of Michigan

## Scholarly Interests

Current research topics examine the influence of educational policies and practices on educational equity and access. Two strands comprise this work. The first focuses on high school reform in general, and the small-schools movement in particular. The second research strand employs large nationally-representative datasets and growth curve modeling within HLM frameworks to examine race and social class disparities in young children's cognitive growth.

## Michael Rebell

Professor of Law and Educational Practice Education Policy and Social Analysis

## Educational Background

A.B., Harvard College;

LL.B., Yale Law School

## Scholarly Interests

Equity in Education. Role of the Courts in Institutional Reform Litigations. Social Reform.

## Susan Recchia

Associate Professor of Education
Curriculum and Teaching

## Educational Background

B.A., University of California, Santa Cruz; M.A., California State University, Northridge; Ph.D., University of California, Los Angeles

## Scholarly Interests

Social and emotional development of young children. Adultchild relationships across contexts. Infants and preschoolers with special needs. Early childhood professional development.

## Craig Richards

Professor of Education and Director, Summer Principals Academy
Organization and Leadership

## Educational Background

B.S., University of Wisconsin at Green Bay; M.S., University of Wisconsin at Milwaukee; M.A., Ph.D., Stanford University

## Scholarly Interests

The ecology of leadership and development, ecological and dynamic modeling of education systems, school finance funding policy, state/market approaches to school reform, and performance accountability systems.

Francisco Rivera-Batiz
Professor of Economics and Education
Education Policy and
Social Analysis

## Educational Background

A.B., Cornell University; Ph.D., Massachusetts Institute of Technology

## Scholarly Interests

Education and economic development. International and public affairs. Race, ethnicity and gender in the labor market. Immigrants and education. The Latino population of the United States.

## Ann Rivet

Associate Professor of Science and Education Mathematics, Science, and Technology

## Educational Background

Sc.B., Brown University; M.S., Ph.D., University of Michigan

## Scholarly Interests

Design of project-based science learning environments for middle and high school. Urban systemic reform. Classroom-based research. Student learning through inquiry. Teaching and learning of earth sciences.

LORIANN Roberson
Professor of Psychology and Education
Organization and Leadership

## Educational Background

B.A., Ph.D., University of Minnesota

## Scholarly Interests

Employee motivation and work attitudes. Workforce diversity issues, including diversity training and the effects of stigmatization on performance.

## Janice Robinson

Vice President for Diversity and Community Affairs and Assistant Professor of Higher Education
Organization and Leadership

## Educational Background

B.S., Bridgeport University; M.A., Ed.M., Teachers College, Columbia University; J.D., St. John's University School of Law; Post Graduate Certificate, Harvard University Graduate School of Education

## Scholarly Interests

Affirmative Action in higher and legal education. Legal issues in education. Access, retention and diversity in higher education. University and professional school leadership.

## Philip Saigh

Professor of Psychology
and Education
Health and Behavior Studies

## Educational Background

B.A., University of North Carolina; M.A., Ph.D.,
University of Georgia

## Scholarly Interests

Epidemiology, etiology, assessment, and cognitive-behavioral treatment of posttraumatic stress disorder in children and adolescents; child abuse; developmental psychopathology; test development and validation; crosscultural research on child-adolescent psychiatric disorders, and prevention research.

## John Saxman

Professor of Speech Pathology Biobehavioral Sciences

## Educational Background

B.A., San Diego State University; M.S., Ph.D., Purdue University

## Scholarly Interests

Communication disorders. Phonatory behaviors across the lifespan. Experimental Phonetics.

## Sandra Jane Schmidt

Assistant Professor of Social Studies Arts and Humanities

## Educational Background

B.A., Swarthmore College; M.A., University of Michigan; Ph.D., Michigan State University

## Scholarly Interests

Social theory in geography and geography education, public space and civic efficacy, curriculum theory, queer theory, postcolonial studies in Africa, teacher education.

Judith Scott-Clayton
Assistant Professor in
Economics of Education
Education Policy and
Social Analysis

## Educational Background

B.A., Wellesley College; Ph.D., Harvard University

## Scholarly Interests

Labor economics and higher education policy. The role of financial aid policy in addressing inequalities in educational attainment, the consequences of rising term-time student employment, and the interactions between program/bureaucratic complexity, family background, and college success.

## Yolanda Sealey-Ruiz

Assistant Professor of English and English Education
Arts and Humanities

## Educational Background

B.A., New York University;
M.A., Teachers College; Ph.D., New York University

## Scholarly Interests

Critical English Education. Culturally Relevant Pedagogy. Urban teacher education. Educational trajectories of African American adult reentry women. Achievement gaps.

Marjorie Siegel
Professor of Education and Chair of the Department of Curriculum and Teaching
Curriculum and Teaching

## Educational Background

B.S., University of Wisconsin-

Madison; M.S., Ed.D., Indiana University

## Scholarly Interests

Multimodality and literacy education, Content area literacies, Cultural and critical perspectives on literacy education.

## Stephen Silverman

Professor of Education and
Chair of the Department
of Biobehavioral Sciences
Biobehavioral Sciences

## Educational Background

B.S., Temple University; M.S.,

Washington State University;
Ed.D., University of
Massachusetts, Amherst

## Scholarly Interests

Physical education. Research on teaching. Research methodology.

LaURA Smith
Assistant Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., University of Virginia; M.S., Ph.D., Virginia Commonwealth University

## Scholarly Interests

Classism, social class, and poverty. Social justice frameworks for psychological services. Com-munity-based psychological interventions. Participatory action research. Whiteness and contemporary racism. Group psychotherapy

## Mariana Souto-Manning

Associate Professor of Early
Childhood Education
Curriculum and Teaching

## Educational Background

B.S.Ed., M.Ed., Ph.D., University of Georgia

## Scholarly Interests

From a critical perspective, I examine the sociocultural and historical foundations of schooling, language development, literacy practices, cultures, and discourses. I study how children, families, and teachers from diverse backgrounds shape and are shaped by discursive practices, employing a methodology that combines discourse analysis with ethnographic investigation.

## Gita Steiner-Khamsi

Professor of Education
International and
Transcultural Studies

## Educational Background

Dr. h.c., Mongolian State University of Education; Ph.D., M.A., University of Zurich, Switzerland

## Scholarly Interests

International policy studies in education. School and teacher education reform from an international perspective. Education, development and international cooperation. Transnational policy borrowing/lending and globalization. Theories and methods (case study methodology) in international and comparative education. Analytical work, strategic planning and program evaluations in Mongolia and Central Asia (Tajikistan, Kyrgyz Republic).

## Derald Wing Sue

Professor of Psychology
and Education
Counseling and
Clinical Psychology

## Educational Background

B.S., Oregon State University; M.S., Ph.D., University of Oregon

## Scholarly Interests

Multicultural counseling and psychotherapy. Psychology of racism and antiracism. Cultural diversity. Cultural competence. Multi-cultural organizational development. Mental Health Law.

## Elizabeth Tipton

Assistant Professor of Applied Statistics
Human Development

## Educational Background

B.A., Transylvania University, Lexington, KY; A.M., University of Chicago; M.S., Ph.D. Northwestern University, Evanston, IL

## Scholarly Interests

External validity of experiments; sample selection bias; and treatment effect variance.

Maria Torres-Guzman
Professor of Bilingual Education
Arts and Humanities

## Educational Background

B.A., Universidad de Puerto

Rico; M.A., University of Michigan; M.A., Ph.D., Stanford University

## Scholarly Interests

Linguocultural spaces in literacy; Teaching in multiple languages as identity formation; Minoritized language groups such as the Latino in the U.S., Basque in Spain, or the Maori in New Zealand; Puerto Rican women leaders in NYC educational settings.

## Mun Tsang

Professor of Education
and Director for the Center on Chinese Education,
Cheung Kong Professor of Economics of Education, Chinese Ministry of Education Education Policy and Social Analysis

## Educational Background

B.S., M.S., Massachusetts Institute of Technology; M.A., Ph.D., Stanford University

## Scholarly Interests

Costs and financing of education. Chinese education policy. Education and economic development.

## Barbara Tversky

Professor of Psychology and Education
Human Development

## Educational Background

B.A., M.A., Ph.D., University of Michigan

## Scholarly Interests

Spatial thinking and language, diagrammatic reasoning, visual communication, design cognition, gestures, event perception, cognition and learning, embodied and situated cognition.

## Herve Varenne

Professor of Education
International and
Transcultural Studies

## Educational Background

License-ès-Lettres, Université d'Aix-Marseille; M.A., Ph.D., University of Chicago

## Scholarly Interests

Culture, communication, and education with special attention to comparative and historical conditions. Polity and community theory, particularly as it applies to families, their immediate situations, and their positions in a global humanity as the joint production of all involved.

Lalitha Vasudevan
Associate Professor of
Technology and Education
Mathematics, Science, and Technology

## Educational Background

B.A., Ph.D., University of

Pennsylvania

## Scholarly Interests

New technologies; Race/ethnicity and gender in education; Literacies; Deconstructing the
"School-to-prison" pipeline.
Helen Verdeli
Assistant Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., Deree College, Athens, Greece; M.Sc., London School of Economics, UK; M.A., Morehead State University; Ph.D., Yeshiva University

## Scholarly Interests

Prevention strategies for adolescent children of bipolar parents; Conducting and testing psychotherapy in developing countries.

## Ruth Vinz

Enid and Lester Morse Professor in Teacher Education and Chair of the Department of Arts and Humanities
Arts and Humanities

## Educational Background

B.S., Montana State University;
M.A., Boise State University;

Ph.D., New York University

## Scholarly Interests

Teacher Preparation and the Professional Education of Teachers. Culturally Responsive Teaching. The Teaching and Learning of Secondary School Literacies.

## Bruce Vogeli

Clifford Brewster Upton Professor
of Mathematical Education Mathematics, Science, and Technology

## Educational Background

B.S., Mount Union College; M.A., Kent State University; Ph.D., University of Michigan

## Scholarly Interests

International and comparative mathematics education. Education of the mathematically gifted. Curriculum development and evaluation. Fulbright Senior Specialist (2002-2007).

Cally L. Waite
Associate Professor of History and Education
Arts and Humanities

## Educational Background

B.A., New College; M.A., Stanford University; Ed.D., Harvard University

## Scholarly Interests

The transformation of higher education in the late 19th century; historical theory and methodology.

## Erica Walker

Associate Professor of Mathematics Education Mathematics, Science, and Technology

## Educational Background

B.S., Birmingham-Southern College; M.Ed., Wake Forest University; Ed.M., Ed.D., Harvard University

## Scholarly Interests

Racial and gender equity in mathematics education; student persistence in advanced mathematics; mathematics education policy.

## Barbara Wallace

Professor of Health Education Health and Behavior Studies

Educational Background A.B., Princeton University; M.A., Ph.D., City University of New York

## Scholarly Interests

Health disparities research. Diversity training for multicultural competence. Invisible, covert and visible overt violence. Primary, secondary and tertiary violence prevention in school- and community-based settings. Domestic violence. Addictions and dependencies, especially to crack and cocaine. Drug abuse and HIV/AIDS. Health promotion in multicultural settings. Global health.

## Hansun Waring

Assistant Professor of Applied Linguistics and TESOL
Arts and Humanities
Educational Background
B.A., Beijing University; Ed.M., Ed.D., Teachers College, Columbia University

## Scholarly Interests

Language and social interaction: Interactional resources deployed to manage competing demands in various social contexts; advice giving and receiving; second language instructional practices and learning opportunities; crosscultural and interlanguage pragmatics.

Robert Weintraub
Professor of Practice of Education Leadership
Organization and Leadership
Educational Background
B.A., Lehigh University; M.A., Montclair State College; Ed.D., Boston University

## Amy Stuart Wells

Professor of Sociology
and Education
Education Policy and
Social Analysis

## Educational Background

B.A., Southern Methodist University; M.S., Boston University; Ph.D., Teachers College, Columbia University

## Scholarly Interests

Educational policy. Race and education. Charter schools. School desegregation. School choice policy.

James Westaby
Associate Professor of
Psychology and Education
Organization and Leadership

## Educational Background

B.A., University of Wisconsin;
M.A., Ph.D., University of Illinois

## Scholarly Interests

Behavioral reasoning theory and the explanation of human behavior. Social networks and dynamic network theory. Survey research. Attitude assessment. Behavioral change.

## Joanna Williams

Professor of Psychology and Education
Human Development

## Educational Background

A.B., Brown University;

Ed.M., Harvard University;
M.S., Ph.D., Yale University

## Scholarly Interests

Text comprehension. Beginning reading. Students with learning disabilities and other at-risk students.

## Michael Wilson

Assistant Professor of
Inclusive Education
Curriculum and Teaching

## Educational Background

B.S., Frostburg State University, MD; M.Ed., Ph.D., University of Maryland - College Park

## Randi Wolf

Associate Professor of Human
Nutrition on the Ella McCollum
Vahlteich Endowment
Health and Behavior Studies

## Educational Background

B.S., Cornell University;
M.P.H., Ph.D., University
of Pittsburgh

## Scholarly Interests

Disease prevention and health promotion; nutritional and public health; urban and minority health.

## Lyle Yorks

Associate Professor of Adult and Continuing Education
Organization and Leadership

## Educational Background

B.A., Tusculum College;
M.A., Vanderbilt University; M.A., Ed.D., Teachers College, Columbia University

## Scholarly Interests

Action Learning. Collaborative Inquiry. Qualitative Research Methods. Strategic Approaches to Human Resource Development. Application of adult learning theory to individual, group, and organizational learning, and workforce and organizational development.

## Karen Zumwalt

Evenden Professor of Education Curriculum and Teaching

## Educational Background

B.A., Mount Holyoke College; M.A.T., Harvard University Graduate School of Education; Ph.D., University of Chicago

## Scholarly Interests

Curriculum. Teaching. Teacher education. Alternative routes to certification.

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Thank you for your interest in Teachers College, Columbia University. For more information regarding Teachers College Admissions, please refer to the Guide to Admission (www.tc.columbia.edu/apply).

## APPLYING TO TEACHERS COLLEGE

## About the Application Process

Teachers College is a graduate-only institution. Applicants must hold, or be in the process of obtaining, the equivalent of a U.S. baccalaureate degree in order to be considered for admission.

Applicants may apply to only one program at a time.

Teachers College admits students for Spring, Summer, and Fall entry. However, not all programs or degree levels are available for all entry terms.

A complete list of available programs, degrees, and entry terms can be found on the Office of Admission's website (www.tc.columbia.edu/ apply).

## How to Apply

The Teachers College Application for Admission is available online (www.tc.columbia.edu/ apply) and can be completed over several sessions, if necessary.

The complete Teachers College application consists of the application form, as well as additional materials to be submitted both online and through mail to the Office of Admission.

Applicants are responsible for collecting and submitting all required application materials to the Office of Admission. Official scores of any required standardized test, such as the TOEFL, GRE, or MAT must be directly reported to Teachers College Office of Admission by the Testing Centers. Refer to the "Standardized Tests" section for more information.

A Teachers College ID number (TC ID) is issued to each applicant via e-mail once her/his application form has been fully submitted. The TC ID is a randomly-generated eightdigit number preceded by the letter "T" that is used to identify the applicant throughout the application and enrollment process.

Any application components not submitted online should be mailed to:

Teachers College, Columbia University
Office of Admission, Box 302
525 West 120th Street
New York, NY 10027-6696
Applicants using DHL, FedEx, or UPS should have their materials delivered to:

Teachers College, Columbia University
Office of Admission
Thorndike Hall, 3rd Floor
525 West 120th Street
New York, NY 10027-6696
All hard-copy materials should be accompanied by the Document Cover Sheet (www.tc. columbia.edu/apply) in order to expedite processing.

## Application Deadlines

For most Teachers College programs, the application deadlines are as follows:

Summer or Fall Entry
Ph.D. Final Deadline: December 15
Ed.D. programs:
Early Deadline: January 2
Final Deadline: April 1
Master's programs:
Early Deadline: January 15
Final Deadline: April 15
Spring Entry
Final Deadline: November 1
Please note:

- Not all programs are available for all entry terms.
- Only complete applications will be eligible for review. In order for an application to be considered complete, the Office of Admission must receive all required application materials by the designated deadline.
- Scholarships are awarded to those students who apply and complete the Teachers College Scholarship application by published early deadlines.
- Applications received after the early deadline may be considered on a space-available basis.


## COMPONENTS OF THE COMPLETE APPLICATION

Below is a list of items that must be received by the Office of Admission to ensure a complete application. Please note only complete applications will be eligible for review.

Under no circumstances can any application materials submitted to the Office of Admission be returned to an applicant or forwarded to another college, university, or place of business. All records submitted in support of an application for admission become part of a student's permanent record at Teachers College.

## Completed Application Form

The application for admission is available online at www.tc.columbia.edu/apply. A valid e-mail address must be included on the application form, as it will be used for all correspondence from the Office of Admission.

Application Fee
New application $\$ 65$
Re-application $\$ 35$
Non-Degree $\$ 65$
The application fee is nonrefundable.
The application fee must be submitted electronically through the online application (credit card or checking or savings account routing number). Application fees made by checking or savings account routing number must be drawn on a U.S. bank.

## Personal Statement

Applicants should present a carefully planned and written statement two to three pages in length, double-spaced, describing their background, past work in the intended field of study, plans for graduate study and a professional career, or any other information they feel is relevant. Applicants who are currently registered in a graduate program at another university should explain why they wish to leave. The personal statement must be submitted electronically as a part of the online application.

## Official Transcript(s)

First-time applicants to the College must submit one official transcript from each college or university in which they were enrolled and obtained credit for any period of time, showing all courses, grades and degrees received, if any. Applicants should request that the transcript(s) be returned to the applicant in a sealed envelope with the signature of an authorized official across the sealed flap.

TC Alumni prior to 2005 must submit official transcripts from institutions outside of Teachers College. Alumni and current TC students do not need to request a transcript from Teachers College for their application.

For educational institutions located outside of the United States or Canada, an official credential evaluation from World Education Services. Inc. (WES) is required. Refer to the "International Students" section for more information. International applicants who are required to submit transcripts to WES should not send them to Teachers College.

## Letters of Reference

Applicants are required to submit two letters of recommendation, unless a third is required. More information can be found on the Office of Admission's website (www.tc.columbia.edu/ apply).

Letters of recommendation should be written by people who can comment from personal knowledge on the applicant's academic or professional qualifications for graduate study. Wherever possible, letters of recommendation should be submitted from academic sources. However, if an applicant has been out of school for a number of years, professional recommendations may be used in most cases.

Recommendations written by family members or friends are not appropriate for the purposes of this application. A credentials file at a previous college or university may be submitted to fulfill the letters of recommendation requirement. However, if an applicant has been out of school for five or more years, one additional current letter of recommendation should be submitted.

Letters of recommendation may be submitted electronically through the online application or in paper form. Applicants must provide the name, title, address, and telephone number of each recommender in the space provided on the online application, regardless of the method of submission.

If a paper letter of recommendation is submitted, it must be accompanied by a Teachers College Recommendation Form and Document Cover Sheet (www.tc.columbia.edu/apply). Applicants should request that each letter of recommendation be returned to the applicant in a sealed envelope with the signature of the recommender across the sealed flap. Each recommendation must be received by the Office of Admission in its original sealed envelope. If the recommender prefers, the letter may be sent directly to the Office of Admission at Teachers College. The recommender's signature must appear on both the letter of recommendation and across the sealed flap. Open or unsigned reference letters will not be accepted.

Letters of recommendation are used for admission and scholarship review in the applicant's intended field of study only. All letters of recommendation are destroyed after the review process.

## Résumé

A current résumé or chronological listing of employment and other significant activities must be submitted electronically through the online application.

## Standardized Tests

Standardized Tests are required by some, but not all, Teachers College degree programs. All submitted test scores received by the Office of Admission will be available for review by the Admission committee.

Applicants are expected to take any required standardized tests well before the application deadline(s). Official scores of any required standardized test, such as the TOEFL, GRE, or MAT must be directly reported to Teachers College Office of Admission by the Testing Centers. Expired scores will not be accepted.

For the TOEFL, GRE, or other tests administered by the Educational Testing Service (ETS), the assigned institution code for Teachers College is 2905. No department code should be indicated.

For all applicants whose native language is not English or those who have received a bac-
calaureate degree from an institution where English is not the sole official language of instruction, an English proficiency exam must be taken. An English proficiency exam is required regardless of where the applicant received a graduate degree (if any).

## Please note:

- The minimum TOEFL exam score required by Teachers College is 100 on the internetbased exam (IBT), 250 on the computerbased exam (CBT), and 600 on the paperbased exam (PBT). The TOEFL is administered by Educational Testing Service (ETS). Applicants may obtain further information on TOEFL at www.toefl.org or from their local overseas educational advising center (www. educationusa.state.gov/centers).
- The minimum IELTS exam score required by Teachers College is an overall band score of 7.0. The minimum CPE exam score required by Teachers College is a B. The IELTS and CPE are both administered by the University of Cambridge English for Speakers of Other Languages (Cambridge ESOL). Applicants may obtain further information on these tests from www.cambridgeesol.org.
- Applicants to the Teaching of English as a Second Language (TESOL) or Applied Linguistics programs must submit an English proficiency exam score if their native language is not English, regardless of where their undergraduate and/or graduate degree was obtained. In addition, these programs have exam restrictions and minimum score requirements that differ from all other Teachers College programs. Refer to the individual program listings in the catalog or Guide to Admission (www.tc.columbia.edu/ apply) for more information.


## Supplemental Application Requirements

Some programs require application materials such as standardized test scores or writing samples (separate from the Personal Statement). Refer to the individual program information sections of the Guide to Admission (www.tc.columbia.edu/apply) for more information and instructions on how to submit Supplemental Application Requirements.

## NOTIFICATION OF DECISION

The length of the application review process varies from program to program. The Office of Admission will notify the applicant via e-mail once a decision has been published. This notification will include instruction on how to retrieve the application decision through the online application. The official notification of the decision is the letter bearing the signature of the Executive Director of Enrollment Services. Decisions will not be given over the telephone.

For Summer/Fall applicants who submit a complete application by the published early application deadlines, it is our goal to publish decisions around mid-March. Spring term applicants and applicants applying after the early deadline will be notified on a rolling basis.

Members of the Admissions staff are not permitted to discuss specifics regarding the decision on any application. Admission committee meetings are confidential and information cannot be shared with applications or any other party. Admission decisions are final.

If you have applied to Teachers College three times and were denied admission each time, you must wait three years before submitting another application.

In order to ensure a place in a program, a $\$ 300$ U.S. nonrefundable tuition deposit must be received by Teachers College. Deposit deadlines will be included in the letter of admission. The tuition deposit must be submitted electronically through the Admission Response Form (credit card or checking or savings account routing number). Deposits made by checking or savings account routing number must be drawn on a U.S. bank. Upon enrollment, the tuition deposit will be credited to the student's account.

## DEFERRAL OF ADMISSION

Students may defer their admission to a Master of Arts, Master of Education, or Master of Science degree program for one year, unless otherwise specified by the program. Students admitted to doctoral programs must have the written permission of the program to which they were admitted to defer an offer of admission. Requests for deferral of admission must be indicated on the Admission Response Form. Students wishing to defer are required to submit the $\$ 300$ U.S. nonrefundable tuition deposit at the time of the deferral request.

## TRANSFER CREDIT

Students may apply for transfer credit upon registering at TC. No transfer credit is awarded for Master of Arts students, including Teachers College credits that have already been applied towards a conferred Master of Arts degree. For the Master of Education and the Doctor of Philosophy, a maximum of 30 points completed outside of Teachers College may be transferred. For the Doctor of Education and Doctor of Education in the College Teaching of an Academic Subject, a maximum of 45 points may be transferred. For the Doctor of Philosophy, up to 45 points completed in another faculty of Columbia University may be transferred.

Only graduate courses which have been (1) completed with grades of B or higher, (2) submitted on an official transcript from a regionally accredited institution, and (3) granted/ assigned credit on the transcript of that institution, may be considered for transfer credit. For educational institutions located outside of the United States of Canada, a World Education Services, Inc. (WES) course-by-course evaluation is required. Transfer credit is awarded at the discretion of the faculty advisor.

Refer to the "Degree Requirements" section of the Catalog for more information.

## INTERNATIONAL STUDENTS

International students must hold, or be in the process of obtaining, the equivalent of a U.S. baccalaureate degree in order to be reviewed for admission to Teachers College. Applicants who do not meet this requirement will not be considered for admission.

Applicants are expected to collect and prepare international educational credentials well in advance of the application deadline. Incomplete records will not be reviewed for admission.

If an applicant's credentials are from an institution outside of the United States and Canada, the Office of Admission requires a World Education Services, Inc. (WES) course-by-course evaluation of all post-secondary credentials (undergraduate and graduate, if applicable). It is the applicant's responsibility to provide the necessary paperwork and payment to WES, and to request that a copy of the report be sent to the Office of Admission. The completed WES report must be received by the appropriate admission deadline. The evaluation copy provided to Teachers College becomes an official academic record document and the sole property of Teachers College upon its receipt. WES evaluations will be reviewed by Teachers College administrators and the determination of degree equivalency to U.S. degrees is at the discretion of Teachers College. WES will complete and mail the applicant's evaluation to Teachers College within 7-10 business days from the day all documents are received. For an extra charge, rush services for same-day and three-day evaluations are available. Forms for evaluation by WES may be downloaded from the WES website (www.wes.org). Applications are also available by e-mail, phone, fax, or mail. Refer to the WES website for more information. International applicants who are required to submit WES evaluations should not send transcripts to Teachers College. These materials should be sent directly to WES.

If a school an applicant attended is no longer in existence or it is impossible to obtain official documents from the school attended, the applicant should have the Ministry of Education of that country furnish an official statement testifying to the impossibility of obtaining records. The Ministry should also supply Teachers College with a list of courses ordinarily required in the degree program an applicant has followed in that school or university.

Students who have earned a baccalaureate degree or its equivalent from a college or university where English is not the official language of instruction must take an exam to establish English Language proficiency. Refer to "Standardized Tests" for more information.

Applicants should not submit bank statements or other proof of funds with application materials.

Documents necessary to obtain a student visa (I-20 or DS-2019) are sent only after an applicant is officially admitted to Teachers College and has submitted the Application for Visa Certificate (AVC) (available online at www. tc.columbia.edu/international/newstudent), and supporting documents certifying that the applicant has the necessary funds to meet the cost of full-time study at Teachers College. Holders of student visas ( $\mathrm{F}-1$ or $\mathrm{J}-1$ ) are required to study full-time (at least 12 points per semester). A copy of the ID page(s) of the passport or national ID card, as well as address in the applicant's country of permanent residence are also required.

Be certain that any form not issued in English is accompanied by a notarized English translation.

Individuals holding B-1 or B-2 status, or who entered the United States on a visa waiver, may be in violation of their status if they enroll in classes.

Contact International Services at tcintl@tc.columbia.edu with any questions related to visas or visit www.tc.columbia.edu/international.

## STUDENTS WITH DISABILITIES

The Office of Access and Services for Individuals with Disabilities (www.tc.columbia.edu/ oasid) ensures that programs and services at Teachers College are physically, programmatically, and attitudinally accessible to individuals with disabilities. Equal access is achieved through individualized responses addressing the needs of individuals with conditions including, but not limited to, vision, hearing or mobility impairments, medical conditions, or learning disabilities that affect one or more academic activities.

Office of Access and Services
for Individuals with Disabilities
163 Thorndike Hall
Teachers College,
Columbia University
Box 105,
525 West 120th Street
New York, NY 10027-6696
Tel/Voice: (212) 678-3689
TTY: (212) 678-3853
Video Phone: (866) 624-3281
Fax: (212) 678-3793
Email: oasid@tc.columbia.edu

## ADMISSION AS A

## NON-DEGREE STUDENT

Non-degree status is available to all applicants holding the equivalent to a U.S. baccalaureate degree.

The non-degree application is available online at www.tc.columbia.edu/apply. A valid e-mail address must be included on the application form, as it will be used for correspondence from the Office of Admission.

The non-degree application consists of the online non-degree application form, $\$ 65.00$ non-refundable application fee, and proof of a baccalaureate degree (a photocopy of official transcript or diploma is acceptable). All three application items can be submitted electronically through the online non-degree application process.

A non-degree student may take up to 16 credit points as long as the academic standards of the College are met.

In order to exceed the maximum of 16 points,
a non-degree student must either:

- Be admitted to a Teachers College degree program, or
- Obtain approval from the Registrar for continued registration under non-degree status.

Admission to non-degree status implies no commitment for admission to a degree program. Should a non-degree student become a degree candidate, a maximum of 16 points ( 8 in the major field) taken in non-degree status may be applied toward a degree program.

## CONTACT Information

## Office of Admission

Thorndike Hall, 3rd Floor
Phone: (212) 678-3710
Fax: (212) 678-4171
Email: tcinfo@tc.columbia.edu

## STATEMENT OF <br> NON DISCRIMINATION

Teachers College affirms that it admits students and selects employees regardless of their race, creed, color, religion, sex, sexual orientation, marital status, national origin, citizenship status, age, or disability and thereafter accords them all the rights and privileges generally made available to students or employees at the school.

## RESIDENTIAL SERVICES AT TEACHERS COLLEGE

The Office of Residential Services extends a warm welcome to you as you consider joining our residential community.

The Office of Residential Services at Teachers College, Columbia University, complements the institutional mission of the College by striving to provide housing that is convenient, clean, and safe for campus residents, their families and guests. The department is committed to creating a stimulating, inclusive, and caring environment that supports the out-of-classroom experience and enhances intellectual, personal, and professional development. We collaborate with other campus departments to meet the unique needs of our graduate student population and provide uncompromising quality, innovation, and continuous improvement in a multicultural community.

Teachers College has approximately 600 spaces available for single students and 150 apartments for students with families. Whittier, Bancroft, Grant, and Sarasota Halls are historic buildings similar to other early 1900's New York City apartment-style buildings. Our newest building, 517 West 121st, opened in the fall 2004 semester.

## Eligibility for Housing

In order to be eligible for student housing, students must be enrolled in a degree program at Teachers College and registered for classes. To maintain housing eligibility, residents must be enrolled and registered for a minimum of 9 credits or equivalent each semester (fall and spring). Two-thirds of each semester's credits ( 6 points per term) must be earned course credits (i.e. not Certificates of Equivalency). Semester courses that are defined by the Registrar as full-time, qualify a resident for full-time status. Housing Contracts extend for one calendar year, beginning with the summer term. Any resident who completes 18 credits during the fall and spring semesters combined (or 9 credits during the spring semester for students who begin residency in the spring) is not required to register for summer sessions and may remain in the residence hall, but must reenroll for the upcoming fall semester and live in Teachers College housing for the upcoming fall semester. To remain eligible for summer housing if a resident is vacating in the summer (at the conclusion of Summer A or Summer B) the resident must be enrolled for the summer or have documentation from the College demonstrating an affiliation with the College during the summer. If the resident is teaching in public schools or has dependents in public schools, the resident is permitted to remain in housing until the conclusion of Summer A.

## When to Apply for Housing

Housing offers are based on availability of units, geographic priority, and date of receipt
of application. Applicants outside a 30 -mile radius of the greater New York City area have the highest priority for housing. To complete an application you should visit our website at www.tc.edu/housing and complete our on-line housing application.

The following early application dates are recommended for submitting a housing application:

Fall term entry: February 1st
Spring term entry: September 1st
Summer term entry: December 1st
Please note: Students are encouraged to apply prior to the early application dates listed above and may apply for housing up to one year in advance of the term they seek housing.

Unfortunately, given the limited number of spaces available, we may be unable to accommodate all requests for housing.

## Housing Assignments

Students will be notified by the Office of Residential Services of their housing status on a bi-weekly basis when offers commence for the semester for which they have applied. Each student's assignment letter contains information regarding the unit to which the student has been assigned. This information includes: type of unit, semester housing charge, and approximate size of unit. Also, information regarding check-in dates and times will be enclosed. Notification that a housing space is available will be accompanied with a housing contract and other documentation, which must be returned along with a $\$ 750$ housing deposit to hold the space. This deposit is held in an interest bearing account for the duration of the student's residence and may not be used for semester housing charges.

Every effort is made to accommodate each applicant's housing preferences. However, there is a transfer period after the semester begins in which students may request a change of assignment. Students may choose to exercise the transfer option if the College is unable to accommodate their original request.

Applications will be processed beginning: May 15th: Fall Term
October 15th: Spring Term
March 15th: Summer A Term
April 15th: Summer B Term
Once offered an assignment in Teachers College housing, the housing application may not be deferred to another semester. Hence, the applicant would need to submit a new housing application and fee for the desired semester.

517 West 121 st opened in the fall 2004 semester. The building contains 252 studio apartments. Some have private kitchenettes, while most units share community kitchens which are distributed throughout the building. The regular studios are approximately 215 square feet in size, and each one contains a private bathroom.

Grant Hall is located at 514 West 122nd Street. Two-bedroom shared units are available in the courtyard side of this building. These apartments contain two bedrooms, a bathroom, and a kitchen.

Whittier Hall is located at 1230 Amsterdam Avenue (at the corner of 120th Street) and was constructed in 1901. There are several different types of housing accommodations offered in this residence hall. All assignments include a private bedroom. Room sizes vary in all accommodation types.

In the single rooms, kitchen and bathroom facilities are shared by approximately 20 students. Suites are self-contained units with three to six private bedrooms. Residents of suites share a kitchen, bathroom, and common area. Efficiency units, one and shared two bedroom apartments, and studio units all have a private bathroom and kitchen. Microwaves are provided for students in suites, efficiencies, studios and one and shared two bedroom apartments. A microfridge (a microwave attached to a refrigerator unit) is provided in the single rooms.

All single student housing units are fully furnished. Residents must, however, provide their own linen, cooking utensils, and other household items. All units are equipped with telephone service, voice mail, unlimited local calls, caller ID, cable TV, and internet hook-up.

## Single Student Housing Average Semester Rates <br> (2011-2012 Academic Year)

517 West 121st:
Efficiency $\$ 7,800$
Large Efficiency
(with kitchenette) \$9,500
Grant Hall:
Shared Two-bedroom \$5,000 (limited availability)
Whittier Hall:
Single Room \$3,500-\$3,900
Suite Room \$3,800-\$4,400
Efficiency
(limited availability) \$5,300-\$6,100
Shared Two-bedroom
(limited availability) \$5,000
One-bedroom
(limited availability) \$7,000
Studio (limited availability) \$7,400

## Single Student Housing

Three buildings are available for single-student housing. They are 517 West 121st, Grant Hall, and Whittier Hall.

Please note: Rates are subject to change and typically increase $4-6 \%$ each year.

## Family Housing

Family housing is available for both traditional and non-traditional families. To be eligible for family housing, students must demonstrate that the applicant and the individual(s) with whom the applicant is applying to reside share a qualifying family relationship. Qualifying family relationships under current policy include the following: (a) marriage, (b) presence of minor or dependent child, or (c) domestic partnership, (a long-term relationship between the two adults). Relationships that do not qualify for family housing status include: parents, grandparents or siblings of applicants, other than a minor sibling for whom the resident is the legal guardian.

## Documentation of Family Status

All persons applying for family housing must submit proper documentation along with their application. The following are acceptable forms of documentation:

1. Copy of a current marriage certificate.
2. In the case of a single parent, birth certificate(s), adoption papers, or other appropriate documentation of legal guardianship.
3. Notarized affidavit declaring that the applicants share a domestic partnership. The approved affidavit form is included in the application.
In addition, those who apply as Domestic
Partners must include one of the following with the signed affidavit:
a. Copy of a joint lease naming and signed
by both applicants and their landlord;
b. Joint tax returns for one calendar year immediately preceding the application;
c. Notarized letter on bank letterhead signed by a bank officer indicating a joint saving and/or checking account for at least one calendar year;
d. Affidavit of Domestic Partnership from New York City or any city, which registers unmarried couples who are in a committed, ongoing family relationship.

## Family Housing Options

Teachers College maintains three Family Housing units: Bancroft, Grant, and Sarasota Halls. Typically, one-bedroom apartments are assigned to families with no children. Due to limited availability, two and three bedroom apartments are typically available for families with children. All apartments come fully furnished.

Grant and Sarasota Halls, located at 514 and 512 West 122nd Street, respectively, are sixstory buildings with four apartments on each floor. The two front apartments have an entry foyer, living room, bedroom, kitchen, and bathroom. The two rear apartments have a long hallway with the bedroom, kitchen, bathroom, and living room opening into the hallway.

Bancroft Hall, located at 509 West 121st Street, is an eight-story residence hall with 107 apartments. Each unit has a bathroom, living room/dining room area, kitchenette, and bedroom(s). The front apartments face 121st Street. The rear apartments face a courtyard, which connects Bancroft to Grant and Sarasota Halls. A security officer is on duty 24 hours a day at the Bancroft Hall front desk.

Housing rates vary according to the size and location of the apartment. Residents must pay monthly long distance phone bills and electric charges. Heat and hot water are provided at no additional cost. Unlimited local calls, caller ID, internet and cable TV service are included in the housing rates.

## Family Housing Average Semester Rates (2011-2012 Academic Year)

1 Bedroom Apartment<br>\$6,800-\$7,900<br>2 Bedroom Apartment<br>\$8,300<br>3 Bedroom Apartment<br>\$9,400<br>(limited availability)

Please note: Rates are subject to change and typically increase 4-6\% each year.

## Important Information

- Students may submit an application for housing even if they have not yet applied or been admitted to the College. No offer for housing, however, will be made until students are officially admitted into a Teachers College degree program and have paid the Admission deposit, as established by the Office of Admission.
- Individuals interested in summer only housing should visit our website at www.tc.edu/housing for a Summer Conference Housing application.
- Students are responsible for notifying the Office of Admission (if an incoming student) or the Office of Registrar (if a continuing student) of any changes in mailing address, telephone number, and/or email address.
- Housing applications are only considered for the initial semester for which a student applies. The Office of Residential Services must be notified in writing if a student decides to defer an application. The application will be considered for the requested semester. A housing application may be deferred for a maximum of one year, provided an assignment was never offered.


## Contact Information

- Location:

1230 Amsterdam Avenue, 1B
between 120th and 121st Streets
(beside the Teachers College Bookstore)

- Mailing Address:

525 West 120th Street, Box 312,
New York, NY 10027

- Phone: (212) 678-3235
- Fax: (212) 678-3222
- Email: housing@tc.edu
- Website: www.tc.edu/housing



## TC Halls at a Glance

|  | Bancroft Hall | Sarasota and Grant Halls | Grant Hall | Whittier Hall | 517 West 121st (New Residence Hall) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Population | Co-ed; family housing | Co-ed; family housing | Co-ed; single student housing | Co-ed; single student housing | Co-ed; single student housing |
| Location | 509 West 121st Street (between Broadway and Amsterdam) | 512/514 West 122nd Street (between Broadway and Amsterdam) | 514 West 122nd Street (between Broadway and Amsterdam) | 1230 Amsterdam Avenue (between 120th and 121st Streets) | 517 West 121st Street (between Broadway and Amsterdam) |
| Capacity and Layout | 107 apartments; approximately 14 apartments per floor; one-bedroom, twobedroom, and three-bedroom | 24 one-bedroom apartments per building; 4 apartments per floor | 7 two-bedroom shared apartments; 4 apartments total per floor | 350 residents; approximately 35 residents per floor; single, suite, efficiency, one-bedroom apartment, two-bedroom shared apartment, studio | 252 residents; approximately 10 units per floor; efficiency, and efficiency with private kitchenette |
| Furnishings | All units: desk, desk chair, lamp, sofa, chair, bookcase, dining table and chairs, 1 bed per bedroom (full: onebedroom apartment \& twin: two-bedroom apartment), 2 chests in one-bedroom, 3 chests in two-bedroom, refrigerator, stove/oven; units come furnished | All units: full bed, desk, desk chair, 2 chests, lamp, sofa, chair, bookcase, dining table and chairs, refrigerator, stove/oven; units come furnished | All units: twin bed, desk, desk chair, chest, lamp, bookcase, dining table and chairs, refrigerator, stove/oven, microwave | All units: twin bed, desk, desk chair, armoire/closet, chest, lamp; Single rooms: microwave, small refrigerator; Studio, one-bedroom apartment, and efficiency units: kitchenettes, microwave, small refrigerator | All units: bed, desk, desk chair, closet/armoire chest, bookshelf, microwave, microwave cabinet, refrigerator; Units with kitchenettes: stove/oven |
| Kitchen Facilities | Private kitchenettes | Private kitchens | Shared kitchens | Suite, single units: community kitchens (1 per floor); studio, one-bedroom apartment, and efficiency units: private kitchenettes | Units with kitchenettes: private; units without kitchenettes: community kitchens (every other floor) |
| Bathroom Facilities | Private bathrooms | Private bathrooms | Shared bathrooms | Suite, single units: community bathrooms; studio, one-bedroom apartment, and efficiency units: private bathrooms | Private bathrooms |
| Study and Community Spaces | Computer room with internet connection; study lounge; community room | All facilities located in Bancroft Hall (adjacent to building) | All facilities located in Bancroft Hall (adjacent to building) | Computer room with internet connection; 2 study lounges; 2 TV lounges | Computer room with internet connection; study lounge; TV lounge; courtyard area |
| Laundry | Card and coin-operated washers and dryers | Card and coin-operated washers and dryers | Card and coin-operated washers and dryers | Card and coin-operated washers and dryers | Card and coin-operated washers and dryers |
| Air Conditioning | Window units permitted; Must be installed and removed by a licensed and insured professional | Window units permitted; Must be installed and removed by a licensed and insured professional | Window units permitted; Must be installed and removed by a licensed and insured professional | Window units permitted; Must be installed and removed by a licensed and insured professional | Central; individually regulated thermostats |
| Telephone | Each unit has an assigned phone number \& phone jack; voicemail and call waiting; unlimited local calls | Each unit has an assigned phone number \& phone jack; voicemail and call waiting; unlimited local calls | Each unit has an assigned phone number \& phone jack; voicemail and call waiting; unlimited local calls | Each unit has an assigned phone number \& phone jack; voicemail and call waiting; unlimited local calls | Each unit has an assigned phone number \& phone jack; voicemail and call waiting; unlimited local calls |
| Cable TV | Included | Included | Included | Included | Included |
| Internet | Ethernet | Ethernet | Ethernet | Ethernet | Ethernet |
| Mail and Packages | Mail delivery by USPS; package pick-up at Residential Mailroom (Whittier Hall) | Mail delivery by USPS; package pick-up at Residential Mailroom (Whittier Hall) | Mail delivery by USPS; package pick-up at Residential Mailroom (Whittier Hall) | Mail sorted by staff; package pick-up at Residential Mailroom | Mail sorted by staff; package pick-up at Residential Mailroom (Whittier Hall) |
| Security | 24-hour security desk; swipe card access to building | Swipe card access to building with 24 hour CCTV | Swipe card access to building with 24 hour CCTV | 24-hour security desk; swipe card access to building | 24-hour security desk; swipe card access to building |

## Academic Resources and Services

## RESEARCH AND SERVICE CENTERS AND INSTITUTES AT TEACHERS COLLEGE

To contact any of the centers or institutes listed below by mail, please write to: Teachers College, Columbia University, 525 West 120th Street, New York, NY 10027. Be sure to include the name of the center or institute and the respective Box \# at the College (listed below).

## Accelerated Schools Center

The Accelerated Schools Project is dedicated to the creation of schools in which every child has the opportunity to succeed as a creative, critical, and productive member of our society. The Accelerated Schools Center at Teachers College works with public schools in the New York Tri-State area to implement the Accelerated Schools philosophy and practices by working closely with the schools' leadership, teachers, students, and surrounding community. The Center is also working with schools and universities in Latin America and Spain to establish accelerated schools in those countries.

Director: Pilar Soler
Contact Information:
Box 200
(212) 678-3095
ps302@columbia.edu; www.tc.edu/accelerated

## Center for Arts Education Research

Department of Arts and Humanities CAER undertakes both applied and basic research. To date, researchers have carried out a number of funded assessment studies focusing on the impact of student learning of school-cultural institution collaborations. The first major study undertaken by the Center was an assessment of the work of artists in the aesthetic education program of the Lincoln Center Institute, New York City. Other studies have been completed in Hartford, CT., Philadelphia, PA., Baltimore, MD., and New York City. The largest research study undertaking to date has been funded by GE and the MacArthur Foundation. The purpose of this project was to examine the impact of learning in the arts on the academic school subjects. Current studies involve investigation of creative practice in the arts as research, and the examination of the impact of contemporary culture on the creation of images during adolescence.

Research teams are formed from senior and junior faculty, together with senior doctoral students at Teachers College Columbia University. Projects have involved the development of innovative assessment instruments and methodological procedures, on-site visits, team analysis of data and the production of comprehensive reports.

Co-Directors: Judith Burton and Hal Abeles Contact Information:
Box 78
Professor Burton: (212) 678-3361

Professor Abeles: (212) 678-3288
burton@tc.edu; abeles@tc.edu
Dean Hope Center for Educational and Psychological Services (CEPS)
Department of Counseling and Clinical Psychology; Department of Curriculum and Teaching; Department of Health and Behavior Studies
A training and research center for the College and a community resource that provides help to people of all ages with educational and personal problems. The services offered include psychoeducational evaluations and educational evaluations focusing on learning issues coupled with appropriate remediation, instructional planning and instruction for clients with learning disabilities, adult and child psychotherapy, personal and vocational counseling and psychological diagnostic evaluation. Services are provided by advanced graduate students. All work is supervised by full-time and/or adjunct faculty of the College's programs. Fees are set on a sliding scale that is designed to meet all budgets.

Director: Dinelia Rosa, Ph.D.
Contact Information:
Box 91
(212) 678-3262 or Fax (212) 678-8105
rosa@tc.edu; www.tc.edu/ceps

## Center for Opportunities and Outcomes for People with Disabilities

Department of Health and Behavior Studies The Center for Opportunities and Outcomes for People with Disabilities confronts the challenges facing special education today through its commitment to the production of knowledge and professional expertise aimed at supporting the full inclusion of people with disabilities in society. The broad-based research, evaluation, and demonstration activities of the Center reflect an emphasis on empowering people with disabilities by increasing their capacity and opportunities for self-determination, reducing their vulnerability to victimization and abuse, and addressing the disabilityrelated issues of culturally and ethnically diverse groups, including women and minorities. The Center encourages national and international partnerships aimed at strengthening the connection between research and policy.

Director: Linda Hickson
Contact Information:
Box 223
(212) 678-3076
hickson@tc.columbia.edu; www.tc.edu/oopd

## Center for Technology

\& School Change
The Center for Technology \& School Change (CTSC) works with educators at all levels interested in integrating technology to improve teaching and learning. As a research, evaluation and development center, CTSC helps organizations plan educational uses of
technology to extend the learning process, and studies the effects of new technologies on education. The Center partners with a number of urban districts and institutes of higher education to provide professional development and evaluation services. The Center also pursues research collaborations focused on technology integration and institutional change concerns.

Co-Directors: Howard Budin and Ellen Meier Contact Information:
Box 8
(212) 678-3773
ebm15@columbia.edu; www.tc.edu/ctsc

## Center for the Professional Education

 of Teachers (CPET)Department of Arts and Humanities
The Center for the Professional Education of Teachers establishes partnerships with secondary schools in order to develop effective literacy education in all disciplines. Interrelated initiatives of program development, research, and assessment contribute to a growing understanding of the classroom contexts that promote the learning and uses of literacy. The Center creates team-based projects with faculty, doctoral students, and school-based educators to engage in examinations of how instruction and assessment promote and support students' literacy practices and account for diversity of background.
Professional development programs provide teachers with current research and practice in adolescent literacy education that is intended to support adolescent literacy achievement.

## Director: Ruth Vinz

Associate Director: Britta Van Dun
Contact Information:
Box 182
(212) 678-3161
cpet@tc.edu

## Center for African Education

Department of International
and Transcultural Studies
The Center for African Education promotes research and teaching about education in Africa and the African Diaspora. Its central aim is to create a community of students, faculty, staff, visiting scholars, and practitioners commited to the fields of Education and African Studies and to provide them with a forum to discuss their African interests and work.

Director: George C. Bond
Contact Information:
Box 10
(212) 678-3309; (212) 678-3311
bond@tc.edu

## Center for Benefit Cost Studies in Education

Department of Education Policy and Social Analysis
The Center carries out studies using the economic tools of benefit-cost analysis and costeffectiveness analysis to evaluate both the
returns on educational investments or to choose among educational interventions that have the largest impacts relative to their costs. A special focus is placed on studies of educational investments in at-risk populations that compare the costs to the taxpayer of such investments and the benefits in terms of higher tax revenues and reduced costs of public health, criminal justice and public assistance for increasing educational attainments.

Co-Directors: Clive Belfield and
Henry M. Levin
Contact Information:
Box 181
(212) 6783857
hl361@columbia.edu
belfield@tc.edu
www.cbcse.org

## Center on Chinese Education

College-wide
The purpose of the Center on Chinese Education is to promote education exchange between the U.S. and China and foster understanding of education development and policy in China through research, teaching, and outreach activities.

Director: Mun C. Tsang
Contact Information:
Box 211c
(212) 678-3814
yd2004@columbia.edu
www.tc.edu/centers/coce

## Community College Research Center (CCRC)

Department of Education Policy and Social Analysis (Program in Economics and Education) The Community College Research Center (CCRC) was established in 1996 by the Alfred P. Sloan Foundation and is housed within the Institute on Education and the Economy (IEE) at Teachers College, Columbia University. CCRC conducts and promotes research on major issues affecting the development, growth, and changing roles of community colleges in the United States. In addition to conducting research, CCRC works with community colleges, professional organizations, foundations, and government agencies in an effort to strengthen the research capacity both within the colleges and the broader community, attract new scholars to the field, promote discussion and debate about crucial and often controversial issues, and disseminate existing research.

Director: Thomas Bailey
Associate Director: Lisa Rothman
Contact Information:
Box 174
(212) 678-3091
ccrc@columbia.edu
http://ccrc.tc.columbia.edu

## Creative Arts Laboratory (CAL)

Department of Arts and Humanities
The purpose of CAL is to provide experiential sessions in dance, music, theatre, videography and visual arts to enable students and teachers to design and enact arts experiences that facilitate: (1) development of critical and creative thinking skills in core curriculums through contextual arts learning; (2) teachers' ability to help students make connections across subject matter areas; (3) use of dialogue, collective cognition and reflection in the classroom. CAL is offered as a 2 or 3 credit course and professional development for non-TC groups of teachers.

Director: Dr. Lenore Pogonowski
Contact Information:
Box 139
(212) 678-3896

Lmp16@columbia.edu
www.tc.edu/centers/cal

## Edward D. Mysak Clinic for Communication Disorders

Department of Biobehavioral Sciences (Programs in Speech-Language Pathology and Audiology)
The Mysak Clinic is the on-site clinical training facility for students in the masters program in speech/language pathology. The Clinic provides a wide range of diagnostic and therapeutic services in speech, language, hearing, and augmentative communication for all ages of individuals with communication disorders. Services are provided by fully certified and licensed clinical educators as well as qualified graduate clinicians under direct supervision by the clinical faculty.

Director: Jo Ann Nicholas
Contact Information:
Box 191
(212) 678-3410
nicholas@tc.edu
www.tc.edu/centers/mysak

## Hollingworth Center

Department of Curriculum and Teaching The Hollingworth Center, a program within the Department of Curriculum and Teaching is a service, research and demonstration site. The Center is designed to provide internship and training opportunities for the graduate students of Teachers College, develop model programs in early childhood education, and offer enriched educational services for children, families and educators. Primarily concerned with nurturing the talent development of all young children, the Center maintains a special commitment to creating and implementing programs for underserved children and teachers in urban schools, and designing model curricula in areas traditionally neglected in elementary schools. Since the Center was established in 1981, it has been internationally recognized for exemplary programs, grant projects, teacher development efforts, and research contributions.

Director: Lisa Wright
Faculty Advisor: Professor James Borland Contact Information:
Box 170
(212) 678-3851
hollingworth@tc.edu
www.tc.edu/centers/hollingworth

## Institute for Learning Technologies

Department of Mathematics, Science, and Technology; Department of Human Development The Institute tries to improve learning by developing new learning technologies, improving use of learning technologies in educational and other settings, and doing research on learning technologies.

Director: John B. Black
Contact Information:
Box 118
(212) 678-4000
black@tc.edu
www.ilt.columbia.edu

## Institute for Urban and Minority Education

 College-wideThe Institute for Urban and Minority
Education (IUME) conducts demonstration, development, evaluation and research projects to better understand the experiences of diverse urban and minority group populations in the different institutions and situations that influence their development. The major activities of IUME include curriculum development, program evaluation, technical assistance and professional development, supplementary education, parent consultation and development and information dissemination.

Director: Ernest Morrell
Assistant Director: Veronica Holly
Contact Information:
Box 75
(212) 678-3780
iume@tc.edu
holly@tc.edu
http://iume.tc.columbia.edu

## Institute of International Studies

Department of International
and Transcultural Studies
The Institute was created in 1964 to strengthen the research arm of the College's international enterprise. With an initial grant from the Ford Foundation, the Institute began to work with a focus on theoretical and practical studies of the role of education in the modernization of traditional societies. Over several decades, the Institute sponsored and supervised substantial research in Africa, Asia, Latin America and the industrial nations as well as on a variety of cross-cultural and comparative studies. During the past few years, the Institute has worked on a variety of issues in Greece, the Balkans, Spain, and Morocco. In general, the Institute helps to formulate the College's international effort and to serve as both catalyst and repository for grants and gifts in aid of international studies at the College, to
strengthen instructional programs with comparative and international thrusts, and to upgrade the quality of research on international or cross-national themes.

Director: Professor Lambros Comitas
Contact Information:
Box 45
(212) 678-4040
lc137@columbia.edu

## Institute on Education and the Economy (IEE)

Department of Education Policy and Social Analysis (Program in Economics and Education) The Institute on Education and the Economy (IEE), established in 1986 by the Board of Trustees of Teachers College, Columbia University, is an interdisciplinary policy research center that focuses its attention on the interaction between education and the economy. IEE conducts a rigorous program of research and policy analysis and provides intellectual leadership primarily in two areas. The first is education reform, particularly that which is designed to respond to changing economic and employment needs. The second involves changes in work, technology, and work organization, and the implications of those changes for the performance of organizations and the skill needs and well being of the workforce.

Director: Thomas Bailey
Associate Director: Lisa Rothman
Contact Information:
Box 174
(212) 678-3091
iee@columbia.edu
www.tc.edu/iee

## International Center for Cooperation and Conflict Resolution (ICCCR)

 Department of Organization and Leadership Established at Teachers College in 1986, the International Center for Cooperation and Conflict Resolution (ICCCR) is an innovative Center dedicated to advancing the study and practice of conflict resolution. Our mission is an educational one: to help individuals, schools, communities, businesses and governments better understand the nature of conflict and develop the skills and settings that enable them to resolve conflict constructively. We particularly emphasize the importance of the social, cultural, organizational, institutional, and systemic contexts within which conflicts occur. Our philosophy links theory and research closely with practice. We are committed to conducting important and useful theoretical and applied research on cooperation, conflict resolution and social justice and to communicate our conceptual and practical models in an accessible and engaging manner. We are also committed to developing, evaluating, and providing instruction in state-of-theart methods for the constructive resolution of conflict, understanding that conflicts occur in dynamical systems which are always in a state of flux. Consequently, we employ a "reflectivescholar-practitioner" model in our many scholarly, educational and practical endeavors. As such, we offer our students, instructors, staff, alumni and our external clients a variety of opportunities to connect theory and research with practice, and to allow practice to inform theory and research. Students are awarded an Advanced Certificate in Cooperation and Conflict Resolution upon successful completion of the program of study. A noncredit certificate is also available.

Director: Professor Peter T. Coleman
Contact Information:
Box 53
(212) 678-3402
icccr@tc.edu

## J.M. Huber Institute for Learning in Organizations

Department of Organization and Leadership J.M. Huber Institute for Learning in Organizations is a research-based institute dedicated to advancing the state of knowledge and practice for learning and change in organizations. The Institute partners with diverse organizations to conduct organizational assessments, evaluations, and action research. Through these partnerships, organizations get faster results and better decisions by leveraging learning to improve performance. In this way, the Institute helps businesses, schools, government and not-for-profit agencies increase their capacity to learn, to innovate, develop new skills, and find new ways of working and thinking.

Co-Directors: Martha A. Gephart
and Victoria J. Marsick
Contact Information:
Box 187
(212) 678-3366

Huber_Institute@tc.edu
www.jmhuberinstitute.org

## National Center for Children and Families

Department of Human Development;
Department of Curriculum and Teaching
The National Center for Children and
Families (NCCF) advances quantitative research and policy analysis surrounding the development of underserved children and families. Housed at Teachers College, Columbia University, the Center produces and applies interdisciplinary research to improve practice and to raise public awareness of social issues that affect the well-being of America's children and families. To achieve these goals, the Center presently focuses its work in five related thematic areas: Early Care and Education; Families; School Transitions and Readiness; Systems/Governance; Neighborhood/Community. The Center currently has an annual operating budget of 3 million and a staff of 35 fellows, research assistants and faculty members. The work of the Center is accomplished through a set of synergistic activities: Research and Publication, Training and Fellowships, and Construction of Effective Social Policy.

Directors: Jeanne Brooks-Gunn
and Sharon Lynn Kagan
Contact Information: Ali Hill
Box 226
(212) 678-8255
ahill@columbia.edu
www.policyforchildren.org

## National Center for Postsecondary Research (NCPR)

Department of Education Policy and Social Analysis (Program in Economics and Education) The National Center for Postsecondary Research (NCPR), housed at the Community College Research Center (CCRC) and operated in collaboration with partners MDRC, the Curry School of Education at the University of Virginia, and faculty from Harvard University, was established in 2006 through a grant from the Institute of Education Sciences of the U.S. Department of Education. NCPR studies the effects of policies and practices designed to help students make the transition to college and master basic skills needed to advance to a degree. NCPR researchers use rigorous methods to examine widely-used programs such as dual enrollment and developmental learning communities. NCPR is committed to research that will help strengthen the performance of institutions of higher education and improve student success.

Director: Thomas Bailey
Associate Director: Lisa Rothman
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www.PostsecondaryResearch.org

## National Center for Restructuring <br> Education, Schools and Teaching

 (NCREST)Department of Curriculum and Teaching The National Center for Restructuring Education Schools and Teaching (NCREST) is an education research and development organization that helps to build the capacity for successful school reform in the New York area and around the country. NCREST documents successful restructuring initiatives, fosters the development and sharing of the expertise of practitioners, builds connections between practice and policy, and produces print, video and web-based products that deepen and clarify our understanding of education reform.

Co-Directors: Jacqueline Ancess and Thomas Hatch
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hulacka@tc.columbia.edu
www.tc.edu/centers/ncrest

## National Center for the Study of Privatization in Education

Department of Education
Policy and Social Analysis
The Center was established to provide independent, non-partisan information on and analysis of privatization in education. Understanding the consequences of such initiatives as vouchers, tuition-tax credits, educational contracting, independent schools and other forms of privatization is confounded by ideological arguments from both advocates and opponents with little dispassionate analysis of claims and evidence. The goal of the NCSPE is to establish a more productive forum on issues regarding privatization of education through research, evaluation, conferences, publications, and dissemination. Particular attention is devoted to the implications of educational privatization for the health of public education. Research products available for free download on the NCSPE website include the following topics: Education Vouchers, For-profit Secondary and Higher Education, Home-schooling, Charter Schools, School Contracting, and Tuition Tax Credits.

Director: Henry M. Levin
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www.ncspe.org

## Peace Education Center

Department of International
and Transcultural Studies
The Teachers College Peace Education Center's (TCPEC) mission is to further the development of the field of peace education, particularly in recognition of the unprecedented need to address issues of security, war and peace, human rights and social justice, sustainable development and ecological balance. The Peace Education Center was established in 1982 by Betty A. Reardon to develop research and provide outreach, resourcing, training and in-service education. The Center has collaborated closely with similar centers around the world as well as the United Nations, UNESCO, the International Peace Research Association and the Global Campaign for Peace Education.

Co-Directors: Monisha Bajaj and Lesley Bartlett
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bajaj@tc.edu,bartlett@tc.edu

## Research Center for Arts and Culture

Department of Arts and Humanities
Provides long-term systematic research and documentation on the conditions, needs and situation of living artists in America; explores the relationship between the public, individual artists and the arts sector; serves as an auspice for research by scholars, students and professionals in arts management education and training around the world; offers a forum for
research and discussion about cultural policy, arts management, arts education and arts law issues. Our sub-specialties are: Research and Practice, International Arts Management including Cultural Policy, Conferences and Colloquia, Web Site and Databases including listserv, bibliography, research and articles. Additional data maintenance and dissemination by Princeton University's Cultural Policy and the Arts National Data Archive (CPANDA).

Director: Joan Jeffri
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www.tc.edu/rcac

## School Law Institute

Department of Education
Policy and Social Analysis
The School Law Institute is a five-day summer program available for three graduate credits or on a non-credit basis. It examines recent legal developments from the standpoints of law, policy, and practice. The Institute serves policy analysts, policy makers, researchers, new and career educators, charter-school professionals (board members, administrators, and teachers), special education and ELL staff, union reps, state-department staff, attorneys, and advocates. Topics include federal policy issues (NCLB, Race to the Top, etc.), safety and order (tort liability, harassment and bullying, child abuse, search and seizure, and the schools' authority to regulate student and staff conduct on and off campus); equity issues (promoting racial and ethnic diversity, the rights and needs of English-language learners, high-stakes testing, school-finance reform/educational adequacy, special education, and issues of poverty and race in education); and free speech rights of students and teachers. Presenters include TC Professors Heubert, Levin, and Rebell, and an eminent national faculty including Jack Jennings, Gary Orfield, Patricia Gandara, Rhoda Schneider, Maree Sneed, and Perry Zirkel.

Please visit our website,
www.tc.edu/ceoi/SchoolLaw/, or contact us by phone at (212) 678-8331 or by email at SLI@tc.edu.

Faculty Director: Professor Jay Heubert Box 157

## Teachers College Reading and Writing Project

Department of Curriculum and Teaching The Teachers College Reading and Writing Project has been one of the nation's premier providers of literacy professional development for K-8 teachers for over two decades. The Project devotes its time equally to improving the teaching of reading and writing, and does all this work with strong support and involvement from school leaders. It is also a think
tank, developing methods. The Project's school-based work in reading and writing is complimented by an array of other professional development opportunities at the College including monthly Leadership Conferences for principals and superintendents, day-long workshops for teachers and administrators, leadership groups for teachers, study groups for coaches and assistant principals, and summer institutes on the teaching of reading and the teaching of writing.

Director: Lucy Calkins
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calkins@tc.edu
http://www.readingandwritingproject.com

## The Elbenwood Center for the Study of the Family as Educator

The Elbenwood Center for the Study of the Family as Educator is dedicated to improving the education of children and adults through a fuller understanding of the strengths and creative intelligence to be found in families of all forms and backgrounds. The Center pursues various lines of systematic research and inquiry that bring interdisciplinary scholarly perspec-tives- particularly those of the social sciences and humanities- to bear in illuminating education within families, as well as the connections between families and other educative institutions. Topics of inquiry include: family memories; grandparents as educators and multigenerational education; the social networks and educative styles of teenagers; family context of literacy; the connections among families, schools, museums, and libraries; the significance of television and information technologies for families; the educational implications of family migration and immigration. The Center's activities include research, symposia, seminars, and workshops. Faculty and students who participate in the Center come from various departments at Teachers College and elsewhere in Columbia University. The Center also maintains liaisons with other institutions through project partnerships.

## Director: Hope Jensen Leichter

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hl177@columbia.edu
www.tc.edu/centers/elbenwood

## The Klingenstein Center for

## Independent School Leadership

Department of Organization and Leadership The Klingenstein Center for Independent School Leadership aims to develop and renew leaders for independent schools. Seeking highly motivated women and men at varying stages of their careers, the Klingenstein Center attracts students from across the United States and around the world for study, research and leadership development in independent school education.

The Center offers two formats for a Master's Degree Program in Education Leadership with a concentration in Private School Leadership. Students can apply to either the nine month master's program in session from September through June, or to the two-summers' intensive which includes site-based research at students' current schools during the interim academic year. Both programs provide a course of study that aims to develop their ability to exercise leadership and to increase their capacity to meet the challenges of leadership. The special features of the programs include coursework and guided fieldwork experiences specifically geared to meet the needs of independent school educators. The Center also offers twoweek leadership programs that address different stages of educators' professional careers: the Summer Institute for Early Career Teachers (June) and the Heads of Schools program (January).

Director: Pearl Rock Kane
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www.klingenstein.org

## The Rita Gold Early Childhood Center

 Department of Curriculum and Teaching The Rita Gold Early Childhood Center serves to promote the growth and development of infants, toddlers, preschoolers, and their families through four inter-related practices: child care and educational services for young children, transdisciplinary professional preparation for graduate students, ongoing research to improve practice and inform theory in early childhood care and education, and outreach activities for early childhood professionals locally, nationally, and internationally. Founded in 1982 as the Center for Infants and Parents and located at Teachers College, the Center now provides inclusive and culturally responsive care for infants, toddlers, preschool children, and their families who are affiliated with Columbia University. The Center is fully integrated with the Teachers College Early Childhood Education academic programs, and serves as a practicum site for students.Faculty Director: Susan L. Recchia
On-Site Associate Director: Patrice Nichols Box 98
ritagoldcenter@tc.columbia.edu
www.tc.edu/centers/ritagold

## Urban Science Education Center <br> Department of Mathematics, <br> Science, and Technology

The Urban Science Education Center is a research and development center geared towards directly addressing the challenges that face the teaching and learning of science in city schools. The mission of the Urban Science Education Center is for all urban students to have equitable and just opportunities to develop the kinds of science understandings, skills,
and ways of knowing that will allow them to make informed decisions about the science, mathematics, and technology related matters that they encounter in their daily lives. The Center's work focuses on the intersecting areas of teaching, research and development, as framed by the following goals:
(1) To improve student science achievement in urban schools;
(2) To build a network of public elementary, middle, and high schools focused on improving science education;
(3) To improve the preparation of teachers for urban schools; and
(4) To provide professional development with a focus on content understanding, inquiry based instruction, and pedagogical content knowledge.

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Felicia Moore Mensah
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www.tc.edu/centers/urbanscience

## THE GOTTESMAN LIBRARIES THE LIBRARY

The Gottesman Libraries at Teachers College house one of the nation's largest and most comprehensive research collections in education. The collection is comprehensive in American elementary and secondary education, and in such subject areas as psychology, particularly applied psychology, educational administration, the history and philosophy of education, guidance, special education, higher and adult education, speech and language pathology and audiology, health and nursing education, nutrition, curriculum and teaching, communications and computing technology, recreation, and international and comparative education. Research resources in printed, non-printed, and electronic formats include all important reference works; a wide selection of monographs; extensive journals; and major indexing and abstracting services.

## Online Services

The library's online site, accessible from the Teachers College homepage, is the focal point for a growing array of library services that support instruction and research at the College. The website combines news and information, access to local and remote databases, and exhibits that showcase the accomplishments and contributions of notable Teachers College persons and programs, particularly as they relate to or are reflected in library collections and archives. Through advances in electronic information resources and global networks, library users increasingly have access to the virtual library, providing the means to search and
retrieve a growing percentage of the universe of documents and files. The online public access catalog integrates the library's catalog information with up-to-the-minute circulation, reserve, acquisitions, and serial control information.

## Russell Hall Services

In addition to access to print and electronic collections in Russell Hall, the library provides reserve readings, reference materials, research support, library instruction services, including course-specific instructional support, and assistance in the use of hundreds of online information resources.

Interlibrary loan provides Teachers College students, faculty, and staff with access to books and periodical literature not owned by the Gottesman Libraries or the Columbia University Libraries. By use of national and world-wide catalogs and through cooperative agreements with libraries around the world, the library can provide books, dissertations, or copies of journal articles.

The recently renovated Russell Hall includes individual and group study rooms, wired and wireless internet access, and a full program of events throughout the year. The Library Café at the library entrance offers beverage and snack services during library hours.

## The Columbia Connection

Students at Teachers College have complete access to the collections of the Columbia University library system, the nation's seventh largest academic library housing more than six million volumes, four million units of microfilm, 2,500 separate collections, important maps, phonograph records, pamphlets and CD-ROMs.

To facilitate access to scholarly materials, the Columbia libraries have developed Library Web, a powerful integrated web-based library computer system. This resource links users to library catalogs, electronic reference tools and indexes, digital collections (including numerous electronic journals), subject guides and bibliographies, search engines, and extensive information on individual libraries, services, and events.

For further information contact the Gottesman Libraries, Teachers College, Columbia University, 525 West 120th Street, Box 307, New York, NY 10027; telephone: (212) 678-3494.

## TEACHERS COLLEGE PRESS

Director: Carole Pogrebin Saltz Established in 1904 as the Bureau of Publications, Teachers College Press is one of the oldest and most distinguished publishers of educational materials in the United States. Since 1965, when the Bureau of Publications became Teachers College Press, its primary purpose has been to publish works that respond to, exam-
ine, and confront issues and change pertaining to education and the educational process. Over the years the publication program has included scholarly and professional works in all areas of education- from early childhood and curriculum to philosophy and critical theory; from assessment and school reform to parenting and social issues. It now publishes more than 60 titles a year and over 600 titles in print. Among the Press's authors are many of the most distinguished educators from throughout the world, including member of the Teachers College faculty.

## TEACHER EDUCATION

Teachers College offers a wide variety of educational experiences for students at the preservice and in-service levels. The Office of Teacher Education/School-based Support Services assists the many teacher education programs located in various departments at the College. Programs are field-based, offering practica, internships, and student teaching.

Departments offer, for qualified holders of a bachelor's degree, programs that lead simultaneously to a Master of Arts degree and to eligibility for New York State certification for teaching in elementary or secondary schools, as well as for special subjects and to special populations. Many of these departments also offer New York State teacher certification with a bilingual extension. The programs typically require a minimum of an academic year and a summer term to complete degree requirements. Applicants need not have included courses in education in their undergraduate programs, but inadequate preparation in the proposed teaching field may necessitate additional coursework to meet admission or certification requirements.

Application for admission to all programs should be made to the Office of Admission, Teachers College. In some programs enrollment is limited, thus early application for admission is advisable. Some programs offer partial tuition grants to qualified applicants. Persons interested in learning more about the College's preservice and in-service programs in teacher education should contact the Office of Teacher Education/School-based Support Services at www.tc.edu/ote.

## New York State Certification of Teachers and Administrators and New York City Licensure

For New York State certification, students can obtain an Institutional Recommendation Data Form (IRDF) from the Office of Teacher Education/School-based Support Services (Zankel 411). Complete IRDFs must be returned to the Office of Teacher Education/ School-based Support Services. Students desiring New York City licensure as a teacher or administrator should inquire at the New York City Department of Education, Division of Personnel, 65 Court Street, Brooklyn, NY 11201, to ascertain specific requirements.

A passing score on the New York State Teacher Certification Examinations (NYSTCE) is required for those wishing any New York State teaching certificate. The New York State Education Department requires that all prospective teachers receive instruction for identifying and reporting suspected child abuse, maltreatment, instructing students for the purpose of preventing child abduction, preventing alcohol, tobacco and other drug abuse, providing safety instruction in fire and arson prevention and school violence intervention and prevention. This requirement is met by successful completion of HBSS 4116, Health Education for Teachers in the Department of Health and Behavior Studies, or through online workshops. No student will be recommended for certification not having satisfied this requirement. Students desiring to fulfill requirements for teacher certification in states other than New York should confer, at an early stage of their study, with the Office of Teacher Education/School-based Support Services.
Requirements for teaching and administration and supervisory positions vary throughout the country. The completion of a degree does not automatically mean fulfillment of state/city certification requirements in states other than New York. Such requirements are to be taken into consideration during program completion. Test requirements also vary from state to state.

## Information on Administrative Certification Programs

Education Leadership Programs leading to eligibility for New York State certification, via institutional recommendation upon program completion, as either School District Leader (SDL) or School Building Leader (SBL) are offered through the Department of Organization and Leadership. A passing score on the NYSTCE is required for those wishing for SBL or SDL certification. Please note that the program must ensure that candidates successfully complete the written and the performance components of the State assessment in School District Leadership for program completion and for recommending for certification.

New York State approved teacher education programs are available in:

## Elementary Education (birth through grade 6)

- Early Childhood Education (birth to grade 2), Childhood Education (grades 1-6), through the programs in the Department of Curriculum and Teaching

Special Subjects and/or Populations

- Teaching of Art, Music, and TESOL through the programs in the Department of Arts and Humanities
- Physical Education and Speech-Language Disabilities through the Department of Biobehavioral Sciences
- Early Childhood Special Education, Inclusive Elementary Education (Dual), and Teaching of Literacy through the Department of Curriculum and Teaching
- Technology Specialist through the Department of Mathematics, Science, and Technology
- Teaching of Literacy, Teaching of Students with Disabilities (Intellectual Disability/ Autism; Applied Behavior Analysis), and Teaching the Hearing Impaired, and Visually Impaired through the programs in the Department of Health and Behavior Studies


## Intermediate or Middle Schools and Junior and Senior High Schools

- Secondary Education (grades 7-12) through the programs in the Department of Curriculum and Teaching
- Teaching of English and Social Studies through the programs in the Department of Arts and Humanities
- Teaching of Mathematics, Biology, Chemistry, Earth Science, and Physics through the programs in the Department of Mathematics, Science, and Technology


## Extensions

- Gifted Education, and Middle School (grades 7-9) through the Department of Curriculum and Teaching
- Bilingual Education through the Department of International and Transcultural Studies


## Teacher Education Standards

 at Teachers CollegeConsistent with the College's long tradition of serving the needs of urban and suburban schools in the United States and around the world, the vision and purpose of professional education at Teachers College is to establish and maintain programs of study, service, and research that prepare competent, caring, and qualified professional educators (teachers, counselors, psychologists, administrators and others). This vision is based on three shared philosophical stances that underlie and infuse the work we do:

Inquiry stance: We are an inquiry-based and practice-oriented community. We and our students and graduates challenge assumptions and complacency, and embrace a stance of inquiry toward the interrelated roles of learner, teacher, and leader in P-12 schools.

Curricular stance: Negotiating among multiple perspectives on culture, content, and context, our graduates strive to meet the needs of diverse learners, both students and other adults, in their school communities.

Social justice stance: Our graduates choose to collaborate across differences in and beyond their school communities. They demonstrate a commitment to social justice and to serving the world while imagining its possibilities.

## Expectations of Teacher Education Candidates at Teachers College

 Our candidates are inquirers/researchers who have breadth of knowledge and a variety of tools to ask questions about educational environments. They reflect on and continually evaluate the effects of their choices on others (children, families, and other professionals in the learning community).
## Lifelong Learners

Our candidates are continually engaged in learning and research. They take responsibility for their professional growth and seek/create learning opportunities for themselves and others.

## Learner-Centered Educators

Our candidates understand their subject matter/disciplines, learners and learning, and curriculum and teaching. They create learning experiences that foster development and achievement in all students.

## Effective Collaborators

Our candidates actively participate in the community or communities of which they are a part to support students' learning and well being.
Advocates of Social Justice and Diversity Our candidates are familiar with legal, ethical and policy issues. They provide leadership in advocating for children, families, and themselves in a variety of professional, political, and policy-making contexts.

## Expectations of Teacher Preparation Programs at Teachers College

Teachers College programs preparing teachers and other professional school personnel ensure that candidates have the knowledge, skills, and dispositions required for effective teaching. By the conclusion of the program, candidates demonstrate:

Knowledge and Understanding of:

- research and inquiry methods and the relationship between research and practice;
- the continuum of lifelong learning and issues of professional concern;
- subject-matter/disciplinary content;
- learners and learning;
- curriculum and teaching;
- processes and strategies of effective communication and collaboration; and
- foundations of democracy, equity, and schooling.

Skills in:

- self-critique and reflection;
- use of research and inquiry methods and application of research to practice;
- planning, implementation, and evaluation of professional growth;
- planning, implementation, and evaluation of curriculum/services;
- communication and collaboration; and
- addressing inequalities in the classroom, school and society.


## Dispositions/Commitments to:

- inquiry and reflection;
- the profession, ethics, and lifelong learning leadership;
- the fullest possible growth and development of all students;
- cooperation and collaboration; and
- social justice and diversity.


## Student Teaching and Observation

All candidates for initial certification must complete two student teaching experiences at two different developmental levels. The student teaching experiences typically begin with observation of an experienced, certified cooperating teacher before gradually enabling the student teacher to assume more responsibility as the term progresses. The College selects cooperating teachers and provides on-site supervision so as to ensure that students are well-supported during this component of their teacher preparation program.

## Procedures for Student Teaching

Student teachers are required to obtain a clearance ticket and keep a copy of the "Student Teaching Handbook." A general orientation to student teaching is offered by OTE/SSS in the beginning of each semester. Please go to www.tc.edu/ote for a full list of workshops, packets, and handbooks. All items are also available at the Office of Teacher Education/School-based Support Services in Zankel 411.

## Peace Corps Fellows Program

The Elliot and Roslyn Jaffe Peace Corps Fellows Program recruits small but outstanding cohorts of Returned Peace Corps Volunteer educators who are ready to make long-term, professional commitments to teach in New York City's public schools. Since 1985, the program has recruited and trained more than 700 urban educators. As an AmeriCorps Professional Corps and Fellows/USA flagship teacher-training program, we provide AmeriCorps tuition awards and partial scholarships to selected trainees. Upon completion of our 15 -week summer intensive training, new Fellows teach full-time in salaried positions in NYC public schools. Invited Fellows make a minimum three-year commitment to teaching, and all related Masters degree coursework must be completed in this time. We recruit candidates for a variety of grade levels and subject areas. Please check www.tc.edu/pcfellows for more information. To arrange for a program interview and a school visit, call (212) 678-4080, email (pcfellows@tc.edu). Application Packets can also be requested at www.tc.edu/pcfellows.

## Teaching Residents at Teachers College (TR@TC)

This 14 month intensive program prepares teachers who can meet the needs of children
and youth in high-need, urban school districts in New York City. The Teaching Residents at Teachers College (TR@TC) program was developed to ensure that teaching residents receive extraordinary preparation and support from a mentor teacher while enrolled in one of three master's degree programs leading to an initial NYS certification. These programs are Teaching of English to Speakers of Other Languages (TESOL), Teaching Students with Disabilities (TSWD) and Intellectual Disabilities/Autism (ID/A). Teaching Residents will receive a substantial scholarship to TC, plus a generous stipend and health insurance assistance. Upon graduation, students will be required to teach for at least three more years in a high-need urban school in New York City. For more information please visit: www.tc.edu/teachingresidents.

## COMPUTING AND INFORMATION SERVICES

Computing and Information Services (CIS) is responsible for academic and administrative computing, media services, the campus data, voice and video network, and telecommunications. These services include email, course web pages, desktop computers, student laboratories, multimedia classrooms, audio-visual services, management information systems, telephone and satellite and video-conferencing connections, and residential cable television. More extensive information may be found at the Computing and Technology Resources pages of TCWeb: www.tc.edu/cis.

The Policy on Acceptable Use of Information Technology Resources at TC is listed on the Policies and Procedures Section of this catalogue.

## Email Accounts

Teachers College provides students with a TC Gmail account and uses it as the preferred way of communicating important and official information. Students are responsible for being aware of official messages sent to that account. To access their TC Gmail account students activate the Columbia University Network ID (UNI) which gives them entry to myTC. This portal also includes access to Columbia libraries and databases, course management systems and several TC Apps. In addition to TC Gmail, students also have a Columbia University email account, called CubMail. It is recommended that you forward your CubMail to your TC Gmail account. For information on how to do this go to http://uni.columbia.edu, click on "Login to Manage Your UNI Account" and click on "Email Forwarding." TC's Course Manage-ment Systems. The UNI is also required to $\log$ into computers in the library, student labs, student lounge, and kiosks located in the halls of Teachers College. TC Gmail accounts are kept for life after graduation. If a student does not register again but does not graduate, the TC Gmail account stays active for 3 more semesters. Any access to employ-ment-related email or other resources is dis-
continued on the last day of employment for the particular office. Columbia University email accounts expire early in the semester following your last date of registration, regardless of graduation. Columbia email forwarding continues indefinitely after you graduate, but continues for only three semesters if you didn't graduate. More information on the Columbia University Network Identifier can be found on the Columbia University Information Technology page: www.columbia.edu/cuit.

## Campus Network

Data, voice, and video outlets as well as wireless access are found in every classroom, and office on the main portion of the campus. Student residences are served by wired access. Internet and Internet-2 access are provided via Columbia University.

## Public Computing Facilities

The Student Computing Support Center in 242 Horace Mann has 70 workstations and consulting support. It provides students with PCs and Macs, software, printers and other peripherals. This laboratory is open daily. The Center's software library includes PC and Mac programs for word processing, web development, graphics, statistical analysis, qualitative analysis and databases. McAfee virus protection is licensed by the College for all students, faculty and staff to download for their home computers. Several software applications including Endnote, a bibliographic database program, are also available through site licenses for home use. Downloads are accessed via the web at my.tc.edu.

Computer classrooms with workstations at each seat in 345 Macy (see below) are available for open use when not scheduled for instruction.

Email and local websites can also be accessed from more than 20 kiosks located in corridors on the first and ground floors of campus buildings and the Student Lounge. The Gottesman Libraries have more than 70 public workstations connected to the Internet. An adaptive technology facility is located in 301 Zankel Hall.

Wireless access is available throughout the academic buildings and Bancroft Hall, and in common areas of the other student residence halls. Those connecting personal computers to the College network are required to maintain current virus protection which can be done by downloading software from the portal at my.tc.edu at no cost. They are also required to maintain current security by continually applying security patches to Windows and Macintosh operating systems.

## TC Apps

TC Apps is a collection of integrated applications available through a sign-on to myTC. These include Google Apps for Education, Moodle for course management, Mahara for ePortfolios, and Alfresco for managing files.

Other online resources include a streaming server for audio and video files available at

## New York State Teachers State-Level Aggregate and Summary Assessment Pass-Rate Data for Certification Examinations 2008-2009 Teachers College

| Program | ATS-W** |  |  | LAST *** |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Completers* | Tested | Pass | $\%$ | Tested | Pass | $\%$ |
| 630 | 454 | 448 | 99 | 457 | 450 | 98 |

NYS Teacher Certification Examination Pass Rate Data
*Number of completers of the institution's teacher education programs leading to an initial teaching certificate
**Number and percent who passed/took the NYSTCE Assessment of Teaching SkillsWritten (elementary or secondary version)
***Number and percent who passed/took the NYSTCE Liberal Arts and Sciences Test
quicktime.tc.edu. A useful online tool to create surveys called "Surveys at TC" can be reached via the portal at my.tc.edu. CIS provides both video-conferencing and a web-based conferencing application called Adobe Connect, which provides desktop audio and video conferencing along with application sharing for those who can't meet in the same physical space. The college owns an island called TC Educator in the virtual world of Second Life, where classes are held and simulations and other exciting new pedagogies are being explored (see http://secondlife.com). Recordings of College events and other interesting digital content from Teachers College are available through the Apple iTunes University store site (see http://itunes.tc.columbia.edu).

## TC Course Management Systems

During the 2011-2012 Academic Year, TC is transitioning from using ClassWeb to using Moodle as a course management. TC also uses BlackBoard. All systems' features include syllabus, links to electronic reserves, discussion, chat, filesharing, and subgroups. These sites are used by most regular TC classes and also support classes taught to students at a distance.

## Instructional Media Lab

The Instructional Media Lab (IML) in 265 Macy is a facility for students and faculty to create rich content for classes, online learning, student teaching, and research. Digital cameras and other equipment are loaned. Workstations allow for computer-based full motion video from camera, VCR, or mini-DV tapes to be edited, integrated with animation and digitized voice and music and to be written to CD, DVD, or tape. IML also provides satellite downlink.

## Computer Classrooms

Computer classrooms for hands-on instruction two rooms with dual-boot Apple Macs for either Windows or Mac instruction in 345 Macy. The Goodman Family Computer Classroom suite includes a classroom equipped with 32 dual-boot MacBooks on tables that can be reconfigured to accommodate varying workgroup sizes. Located in 234 Horace Mann, it also has a seminar room for 10 people. The Macy rooms are available for use by students and faculty when not scheduled for instruction.

## Multi-media Classrooms

The majority of our 65 classrooms have dedicated equipment such as PC's, Macs, VCR/ DVD players, projectors and document cameras. Seven classrooms are outfitted with touchscreen SmartBoards, similar to those often found in K-12 classrooms. Many of the rooms are set up with cameras and software for Lecture Capture. Mobile multimedia carts are available for use in rooms which do not have dedicated equipment.

## Training

Training workshops are scheduled throughout the year on the use of electronic mail, word processing, spreadsheets, social networking media and web publishing, statistical analysis, photo, video editing, podcasting and iTunes U . In addition to workshops, individual training is also available. The workshop schedule may be found on the Computing and Technology homepage (www.tc.columbia.edu/computing). In addition, online training is available through a UNI login at www.lynda.com/portal/columbia.

## Administrative Systems

Students are able to register, drop and add classes, check financial aid, academic history and current grades or pay by credit card via the web portal at my.tc.edu or the telephone through Touchtone Services.

## Microcomputer/LAN Services

Student support is provided at the Student Computing Support Center in 242 Horace Mann as well as in the residence halls.

All faculty and staff have workstations appropriate to their work, with budgeted replacement at $20 \%$ per year. The local area network features file and print services as well as Microsoft Exchange, webservers and other applications. The CIS Help Desk provides problem resolution via telephone and office visits.

## Residential Telecommunications Services

Telephone, voicemail, Internet and cable television services are provided in student and faculty residences. Those living in the Residence Halls have direct connections to the campus data network. Detailed information is found on the Computing and Technology Resources (www.tc.columbia.edu/cis) site under Telephone and Cable TV.

## Student Life and Student Services

## STUDENT LIFE AND STUDENT SERVICES

Teachers College is located in New York City, one of the most important and dynamic cultural and educational centers in the world. Our student population is very diverse and includes international students, scholars and faculty from over 75 countries. TC combines a large number of part-time and full-time students who are very active in professional education circles and either commute or live on campus. There are a variety of student services and organizations at TC designed to support students' programs of study, provide professional development opportunities, foster community and celebrate diversity.

## THE OFFICE OF THE VICE PRESIDENT FOR DIVERSITY AND COMMUNITY AFFAIRS <br> Janice S. Robinson, Esq. <br> Vice President for Diversity <br> and Community Affairs <br> Assistant Professor of Higher Education, <br> Department of Organization and Leadership <br> 128 Zankel, (212) 678-3391 <br> jsr167@columbia.edu <br> www.tc.edu/diversity

Jolene A. Lane
Director for Diversity and
Community Affairs
128 Zankel, (212) 678-8410
lane@tc.columbia.edu
The Office of the Vice President for Diversity and Community Affairs leads the President's and College's initiatives concerning community, diversity, civility, equity, and anti-discrimination. The philosophy is to encourage the College community to listen, learn, educate, and work together in collaborative and positive ways. Working collaboratively and in broadly overlapping areas to weave the Teachers College community together, we endeavor to unify the diverse constituencies, serving the students and alumni, full-time and adjunct faculty, and professional and union staff that comprise the TC community. The Office continues to lead and implement the diversity and community vision by engaging the entire College community academically, administratively and culturally. The areas of focus are diversity and community, equity, anti-discrimination, retaliation and due process concerns, as well as collaboration with the Ombudsman which is an independent office. Simultaneously, the Office focuses on systemic issues by addressing policy and procedural concerns. The Vice President serves as a member of the President's Senior Staff. She chairs the President's Committee for Community and Diversity, the only cross-college constituent committee. The Director of the Office is also a member of the Committee, and her responsibilities coincide with all of the initiatives of the Office as it continues to lead and implement the diversity and community vision at Teachers College.

## THE OFFICE OF THE OMBUDSMAN

Erwin Flaxman, Ph.D.
College Ombudsman
280 Grace Dodge Hall,
(212) 678-4169
flaxman@tc.columbia.edu
www.tc.edu/diversity/ombuds
The Teachers College Office of the Ombudsman is a resource available to students, faculty and staff for resolving problems and conflicts after other efforts have not worked satisfactorily, or when they no longer want to pursue their concerns through formal channels. It is important, however, that they attempt to resolve their problems or register their concerns with their advisors, instructors, department chairs, supervisors or the staff of the College offices before coming to the Ombudsman. The Office of the Ombudsman adheres to all policies and practices of Teachers College and standards of professional practice. Please note: The Ombudsman will always act as a neutral party.

## Services

The Ombudsman will help to resolve problems by:

1. Identifying and recommending options;
2. Providing needed information about relevant college policies and procedures;
3. Investigating the problem and gathering information;
4. Creating an opportunity for better communication among those involved in resolving the problem, including setting up meetings when necessary;
5. Identifying problems that require changes in College policies and practices.

## Confidentiality

All conversations with the Ombudsman are strictly confidential. They will never be discussed without the permission, in writing, of the individual involved, nor can anyone compel the Ombudsman to reveal any information about the situation.

## Impartiality and Independence

The Ombudsman is an advocate for the solution of the problem, not for any particular party, and gives equal attention to and protects the rights of all concerned.

The Office of the Ombudsman does not report to any College administrative office.
The use of the services of the the Office of the Ombudsman does not substitute for a formal grievance procedure. A communication with the Office is off-the-record and does not put Teachers College on notice of a problem. If an individual wishes to place the College on notice, the Office can provide information about how to do so.

## THE OFFICE OF STUDENT ACTIVITIES AND PROGRAMS

The Office of Student Activities and Programs (OSAP) includes four major areas: Graduate Writing Center, Office of Insurance and Immunization Records, Student Activities, and Orientation/New Student Experience. The Office strives to enhance the quality of life and academic experience for students by providing services and programs designed to engage students in the College and University communities. There is a strong commitment to promote professional, co-curricular, recreational, social, cultural, and wellness programs. Events, such as the Casual Conversation Series, and Doctoral Students Dinner Discussions, provide students with the opportunity to learn about College resources and hear faculty and administrators share their research interests and professional experiences. Other co-curricular programs sponsored by OSAP include: Take a Break Series, Broadway shows, sporting events and NYC trips. Students can also participate in more than thirty student organizations which provide additional opportunities to network with all members of the College community. Student organizations varies from special interest groups to honor societies to local chapters of national organizations.
Some of the active organizations are:

- African Studies Working Group
- American Sign Language Club
- Association of Latin American Scholars (ALAS)
- Black Student Network (BSN)
- Coalition of Latino/a Scholars (CLS)
- Current Issues in Comparative Education (CICE)
- Global Intitative for Social Change through the Arts (GiSCA)
- Kappa Delta Pi (national honor society)
- Korean Graduate Student Association
- Organization and Human Development Consulting Club (OHDCC)
- Peace Education Network
- Queer TC
- Society and Economics in Education
- Society for Human Resource Management
- Society for International Education
- Student Advocates for the Arts (SAA)

For more information, please contact the Office of Student Activities at (212) 678-3690 or email studentactivities@tc.edu.

## COLUMBIA HEALTH PROGRAM \& INSURANCE

All students living in Teachers College residence halls are assessed the Columbia Health Program fee. Additionally, all students registered for 12 or more billable credits in the fall or spring semester are assessed the Columbia Health Program fee. The fee covers primary care, counseling and psychological services, health education, support for survivors of sexual assault, as well as the public health services provided to the university community. Additional coverage for medications, lab costs, visits to medical specialists, and hospitalizations are covered by the Columbia Student Medical Insurance Plan available through

Teachers College. Students living in Teachers College residence halls or taking 12 or more billable credits are required to enroll in the Columbia Plan or provide proof of comparable insurance coverage. Information is available from the Insurance \& Immunization Records Office, (212) 678-3006, or email health-immunization@tc.edu.

## IMMUNIZATION RECORDS

New York State requires that all students born on or after January 1, 1957 provide proof of immunity to measles, mumps, and rubella. In addition, New York State requires all students to decide whether or not to be immunized against meningitis and to provide formal documentation of their decision. The required immunization form, which is available on the Admitted Student website, is to be completed and submitted to the Insurance and Immunization Records Office prior to the first day of class.

## TEACHERS COLLEGE STUDENT SENATE

The Teachers College Student Senate is composed of elected student body representativesfrom academic departments and positions at large. The Senate advocates for student voice on campus and participates in college-wide committees which impact the decision-making process and enhances communication amongst students, administration and faculty. For more information please contact the Student Senate via email student-senate@tc.edu.

## GRADUATE WRITING CENTER

The Graduate Writing Center provides disci-pline-specific, individualized, professional development to TC students. The emphasis is on preparing graduate students to be more successful writers, both within their disciplines and in their publishing communities. The Center offers one-on-one fee-based consultations and free writing workshops.

For more information please contact the Graduate Writing Center at (212) 678-3789 or email writingcenter@tc.edu.

## INTERNATIONAL STUDENT SERVICES

Teachers College has a long history of welcoming international students, scholars and faculty to our academic and social community. Currently, over 600 students from 75 countries are enrolled at all degree levels and in every department. The Office of International Student Services (OISS) provides extensive orientation and intercultural program throughout the year; information on responsibilities, benefits and alternatives under immigration laws and regulations; counsel on personal, financial, cultural, academic and other concerns; and cam-pus-wide international awareness events. The OISS staff also assists students in contacting campus and community resources when appropriate. In addition, OISS provides visa and orientation services for international visiting scholars, visa services for non-immigrant staff,
resources for delegations of international visitors and assistance to the College community on regulatory compliance and other international issues and concerns. The office is located in L5 Whittier Hall; (212) 678-3939. Interested individuals can contact the staff by email at tcintl@tc.columbia.edu. In addition, prospective, admitted and current students are encouraged to go to www.tc.edu/ international for up-to-date information.

## INDIVIDUALS WITH DISABILITIES

The Office of Access and Services for Individuals with Disabilities ensures that programs and services at Teachers College are physically, programmatically, and attitudinally accessible to individuals with disabilities. Equal access is achieved through individualized responses addressing the needs of individuals with conditions including but not limited to vision impairments, mobility impairments, deafness/hearing loss, medical conditions or learning disabilities that affect one or more academic activities. A full-time Director, an Associate Director/Program Director of Deaf and Hard of Hearing Services, and Assistant Director, are available to meet with students, facilitate accommodations, and advocate on behalf of students with disabilities. For more information call (212) 678-3689, (212) 678-3853 (V/TTY), (866) 624-3281 (video phone), email oasid@tc.edu, or visit our website at www.tc.edu/oasid.

## RECREATION AND FITNESS

Directly across the street from Teachers College is the Columbia University Marcellus Hartley Dodge Physical Fitness Center, an indoor sports and exercise facility open to our students.
The center features two full-size gymnasiums, a swimming pool, 16 squash and handball courts, fully equipped exercise and weight rooms, a judo-karate room, fencing room, wrestling room, indoor track, and saunas. In addition, there are tennis courts located on the 120th and Broadway corner of Columbia's main campus.

## CAREER SERVICES

Teachers College Career Services (TCCS) is committed to guiding all TC students and alumni throughout the different phases of the career development process. Whether you are entering a new field, advancing within your current profession, or changing directions, we will help you identify and develop the skills and resources necessary for achieving your career goals. TCCS offers individual career consultations and group workshops on all aspects of career development, which equips participants with the information and skills necessary for setting career goals, conducting a successful job search, and managing the interview and salary negotiation processes. Additional TCCS resources include a resume, curriculum vitae (CV), and cover letter review service, self assessment services, mock interviews, doctoral preparation, and a comprehensive online career opportunity database. TCCS's online job database, TCCS LINK, allows employers to promote career opportunities and recruitment
initiatives to TC students and alumni. TCCS LINK enables students and alumni to search full-time and part-time job openings, as well as internships and volunteer opportunities; electronically submit resumes, curriculum vitas (CVs), and cover letters; view and apply for employer on-campus interviews schedules and resume drops; view and register for career service programs/workshops, career fairs, and employer presentations; and access an online resource library. TCCS also coordinates a diverse array of programs and panel presentations throughout the year to help students explore their career options and create professional networks in the areas of education, psychology, health, and international and transcultural studies. Additionally, we offer several career fairs (e.g., PreK-12 Education Career Fair), networking receptions (e.g., Meet the Firms), and employer information sessions to help students and alumni connect with potential employers. The TCCS Alumni Mentoring and Career Networking Program is another valuable resource, which provides students and alumni with an opportunity to meet and speak with TC alumni who are currently working within a variety of career fields. Students and alumni will also find extensive resources in the office's on-site Career Resource Library, as well as on the TCCS website: http://www.tc.edu/ careerservices. Sample online resources include: interview guides, internet resources, school directories, educational publications, professional organizations, and templates for resumes, CVs , and cover letters. For those students and alumni requiring a centralized location for letters of reference and other pertinent materials for the job search and/or graduate school applications, a 24-hour online service through Interfolio, Inc. is accessible through our website. Teachers College faculty and administrators can request specialized workshops for their classes and/or academic programs/departments. Finally, TCCS also has computers, scanners, and printers available for your job search needs. We encourage you to come visit our office so that you can start your career development journey. Career Services is located in 44 Horace Mann, (212) 678-3140, careerservices@tc.edu.

## PUBLIC SAFETY

The Office of Public Safety is charged with providing a safe and secure environment for our College community. The Office is organized functionally with teams assigned to (1) Emergency Operations, (2) Security, and (3) Environmental Health and Safety.

Uniformed proprietary Public Safety Officers provide around-the-clock security for both the academic and residential campuses. Teachers College maintains a system of security video cameras throughout the campus, as well as ID card swipe access-control.

Teachers College Public Safety Officers work closely with institutional security officers from Columbia University, Barnard College, and Union Theological Seminary. The Morningside Area Alliance, a community agency funded in

Teachers College - Columbia University
Campus Crime Statistics

|  | On Campus |  |  | $\xrightarrow[\text { Non }]{\text { Campu }}$ |  |  | Public Property |  |  | Residence Halls |  |  | Total$2006$ | Total$2007$ | Total$2008$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 |  |  |  |
| Murder | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sex Offense- Forcible | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Sex Offense- Non Forcible | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Robbery | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Burglary | 8 | 11 | 13 | 4 | 22 | 23 | 0 | 0 | 0 | 0 | 1 | 1 | 12 | 34 | 37 |
| Aggravated Assault | 0 | 0 | 0 | 3 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 6 |
| Motor Vehicle Theft | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Arrest for Alcohol | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Discipline for Alcohol | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arrest for Drugs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Discipline for Drugs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arrest for Weapons | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Discipline for Weapons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Manslaughter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arson | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hate Crimes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Teacher College - Columbia University Campus Crime Statistics
The Advisory Committee on Campus Safety will provide upon request all campus crime statistics as reported to the United States Department of Education (visit www.highered.nysed.gov/Quality_Assurance/home.html). You may also contact the College at (212) 678-3098 or visit us at www.tc.edu/security for more information.
part by various institutions in Morningside Heights, provides additional security to compliment Teachers College efforts.

The Teachers College campus is located within the 26th Precinct of the New York City Police Department. Teachers College Public Safety Officers work closely with the New York City Police Department, and various local, state, and federal law enforcement agencies.

New York City is one of the world's safest metropolitan communities and our Morningside Heights neighborhood is one of the safest neighborhoods in New York City. The greater Columbia University family of campuses enjoys the lowest crime rate of any Ivy League school in the United States.

## OTHER SERVICES

Additional services available to students include the Teachers College Bookstore, Teachers College Cafeteria, Security Information Desk, Psychological Counseling Services, the Rita Gold Early Childhood Center, ATM and postage machines.

## GENERAL REQUIREMENTS

The minimum requirements for degrees as established by the College and University are given below. Students must consult the appropriate departmental brochures for specific program requirements governing each degree. Students may not be enrolled concurrently in two different institutions; students may not be in two different degree programs or areas of specialization or schools at Teachers College or Columbia University.

## General Residence

For each degree, a candidate offers a minimum of thirty semester hours of acceptable graduate credits taken over no less than the equivalent of a minimum of two academic terms under Teachers College registration. Living on campus is not required. Students electing to earn more than one degree must consult the Registrar about general residence including minimum point requirements for multiple degrees. Following is a chart of minimum residency requirements for several multiple degree requirements. In addition to satisfying residency requirements, a student must meet all degree requirements for each degree as outlined in the Degree Requirements section of the catalog and all degree requirements as outlined by the department.

Period of Candidacy (Master's Degrees) Candidates must be formally admitted to a degree program by the Office of Admission. The period of candidacy for the degrees of Master of Arts, Master of Arts in Teaching, Master of Science, and Master of Education is limited to five years. Every candidate for the Master of Arts, Master of Arts in Teaching, Master of Science, and Master of Education must complete at least 16 points through Teachers College during the final five-year period prior to the award of the degree so as to meet recency requirements.

A candidate may petition the Registrar for an extension of time for adequate reasons if the student has been in attendance in the degree program within the last five years. In such cases, an extension must be recommended by the major advisor and approved by the Registrar. Upon approval, all current degree requirements including the departmental integrative project must be completed. In addition, at least 16 points must be completed through Teachers College during the final fiveyear period prior to the award of the degree. Petitions for extension may be obtained through the Office of the Registrar.

If a student has not been in attendance within the last 5 years and wishes to pursue the completion of the degree, the student must reapply for admission and be accepted into the degree program. Applications for re-admission may be obtained from the Office of Admission.

## GENERAL RESIDENCE REQUIREMENTS

## Minimum Point Requirements for Multiple Degrees

This list only represents minimum point requirements to establish residence for multiple degrees. In addition, each degree program has a planned program of study, and the degree requirements as outlined by your department and in this catalog must also be satisfied. It is possible that students will need to take more than the minimum point requirements.

| Minimum | Minimum | Maximum <br> Point |
| :--- | :--- | :--- |
| TC | Transfer |  |
| Requirement | Credit | Credit |


| Two Degrees at Teachers College |  |  |  |
| :--- | :--- | :--- | :--- |
| M.A. (M.S.) and M.A. (M.S.) | $60 *$ | $60 *$ | 0 |
| M.A. (M.S.) and Ed.M. | 60 | 45 | 15 |
| Ed.M. and Ed.M. | 90 | 60 | 30 |
| M.A. (M.S.) and Ph.D. | 75 | 45 | 30 |
| M.A. (M.S.) and Ed.D. | 90 | 45 | 45 |
| Ed.M. and Ph.D. | 75 | 45 | 30 |
| Ed.M. and Ed.D. | 90 | 45 | 45 |
| Three Degrees at Teachers College |  |  |  |
| M.A. (M.S.), M.A., (M.S.), and Ed.M. | 90 | 75 | 15 |
| M.A. (M.S.), Ed.M. and Ed.M. | 90 | 90 | 0 |
| M.A. (M.S.), M.A. (M.S.), and Ed.D. | 90 | 75 | 15 |
| M.A. (M.S.), M.A. (M.S.), and Ph.D. | 75 | 75 | 0 |
| M.A. (M.S.), Ed.M. and Ph.D. | 75 | 60 | 15 |
| M.A. (M.S.), Ed.M. and Ed.D. | 90 | 60 | 30 |
| Ed.M., Ed.M., and Ed.D. | 90 | 90 | 0 |
| Four Degrees at Teachers College |  |  |  |
| M.A.(M.S.), M.A. (M.S.), Ed.M. and Ed.D. |  | 120 |  |
| (or Ph.D.) |  | 120 | 0 |
| M.A.(M.S.), Ed.M., Ed.M. and Ed.D. (or Ph.D.) | 120 | 120 | 0 |

* Plus an essay or 32 points without an essay for each degree.

Note: If you received a Professional Diploma from Teachers College, please check with the Registrar for minimum requirements.

Applications for re-admission follow the same processes and standards as those for initial admission. If a student is subsequently readmitted to a Master's degree program with a period of candidacy after the expiration of the initial five-year period of candidacy, all current degree requirements including the departmental integrative project and at least 16 points to meet recency requirements must be completed.

## Academic Performance

The Faculty of the College requires that all students maintain acceptable grades as well a satisfactory progress in the completion of degree requirements. Some departments specify an overall minimum grade average (see specific department statements). Any department judging a student to be performing below expectations is authorized by the Faculty to require additional coursework as a means to evaluate the student's continuance within the degree program or at the College. If satisfactory progress as defined by the department is not maintained, a student may be dismissed from the program. In addition, a student whose academic performance in coursework or in other requirements is seriously below the level
required for successful completion of a degree may be denied permission for continued enrollment at the College on the initiative of the Department in which the student is enrolled. There is no formal appeal from such a decision, but the services of the Ombudsman may be requested by the student.

Any student receiving eight or more points in grades of C - or lower is not permitted to continue registration at the College in any capacity and may not receive a degree or diploma. Petitions for exception to this policy are to be submitted, in writing, to the Registrar with a written recommendation from the department in which the student was last enrolled. Such petitions will be submitted to a faculty committee for review and decision.

## Statement on Academic Conduct

A Teachers College student is expected to refrain from any conduct, including cheating, plagiarizing, or purchasing documents submitted for academic evaluation, that calls into question his/her academic and/or professional probity.

Decisions regarding academic evaluation in all aspects of students' work at the College, including coursework, certification examinations, clinical or field experiences, and preparation of dissertations, are within sole jurisdiction of faculty concerned, including, as appropriate, the department or program staff members. Disciplinary actions (e.g., reprimand, suspension, or dismissal) in cases of academic misconduct can be imposed by the academic program or department as described in the Student Conduct Code. Refer to the student Handbook or visit www.tc.edu/oess for more details.

## Application for Master's Degree

or Certificate Award
Candidates for the award of the degree of Master of Arts, Master of Science, Master of Education, or a certificate must file an application (obtained from and returned to the Registrar, in accordance with dates listed in the Academic Calendar). All courses, except those of current enrollment, must be completed at the time of application. If the degree or certificate is not then earned, a Renewal-of-Application is to be filed for reconsideration of the award. (See Academic Calendar for dates). An application for award terminates at the next time for degree conferral but may be renewed upon filing a Renewal-of-Application with the $\$ 25$ renewal fee in accordance with the dates listed in the Academic Calendar. Degree applications are kept on file for a period of three years from the date of the original degree application.

## Graduation

All degrees and certificates are awarded in October, February, and May. Degrees are conferred by the President of the University at the annual Commencement in May.

## Master of Arts Point Requirement

The Master of Arts degree is granted upon the satisfactory completion of no less than 30 points and a formal essay; or 32 points and an acceptable departmental integrative project; or 32 points and successful completion of a departmental comprehensive examination. At least 20 points must be earned in Teachers College courses. The remaining coursework, through Teachers College registration, may be completed in Teachers College or other graduate divisions of the University, but no more than 12 points of graduate credit from other faculties of the University will be credited toward the minimum point requirement. Graduate level courses in the University are numbered from 4000 and above (with the exception of 4000 level courses in History which are considered undergraduate courses).

A candidate for a second Master's degree must be readmitted to candidacy by the Office of Admission. Courses and the integrative project, comprehensive examination, or essay offered for the first Master's degree may not be applied toward the second. The same minimum point requirements stated above apply and must include three Teachers College courses (a course
is defined as one for which at least 2 points are earned) outside the Teachers College major program.

## Program of Study

The program for the Master of Arts must include: a minimum of 12 points in the major field courses, the exact requirement to be determined in consultation with the major advisor. In order to broaden the student's background in education, three Teachers College courses outside the Teachers College major department (in this case, a course is defined as one for which at least 2 points are earned) must be completed as well as a formal essay, comprehensive examination, or an integrative project.

No transfer credit is granted for work completed at other universities to satisfy the minimum point requirement. Electives are chosen in consultation with the major advisor.

## Essay

Students opting for the preparation of a formal essay should check with the Office of the Registrar for instructions. The formal essay must demonstrate the ability of the student to select, organize, and present the results of professional investigation in the major field. The essay may consist of a body of work in a studio or performance area, demonstrating the design, preparation, and presentation of professional works appropriate to the major field. Documentation of such works may include media such as photographs, color slides, TV tapes, film, recordings, or an approved computer software program. An outline of the subject of the essay must be approved by the major advisor and forwarded to the Registrar prior to or accompanying the application for the degree. The original copy of the formal essay is to be submitted to the Registrar no later than the dates indicated in the Academic Calendar. The approved essay is submitted to the College library for retention; the departmental integrative project is maintained in the major department.

## Master of Arts in Teaching

The Master of Arts in Teaching, a Columbia University degree, for students from Columbia, Barnard, or the School of General Studies, is offered as an alternative to the Teachers College Master of Arts degree for prospective secondary school teachers of English, mathematics, science, and social studies. For the current year, applications to this program are not accepted.

## Master of Science

The Master of Science degree is granted upon the satisfactory completion of a minimum of 30 points and a formal essay; or 32 points plus a departmental integrative special project; or 32 points and successful completion of a departmental comprehensive examination. At least 20 points must be earned in Teachers College courses. The remaining coursework
may be completed, under Teachers College registration, in Teachers College or in other graduate departments of the University. Graduate level courses in the University are numbered from 4000 and above. All Barnard College courses are undergraduate courses.

## Program of Study

The program for the Master of Science degree must include at least 20 points in science courses and related technical fields. In order to broaden the student's background in education, a minimum of two Teachers College courses outside the Teachers College major department (in this case, a course is defined as one for which at least two points are earned) must be completed as well as a formal essay, comprehensive examination, or a departmental integrative special project.

No transfer credit is granted for work completed at other universities to satisfy the minimum point requirement. Electives are chosen in consultation with the major advisor.

## Essay

Please refer to this requirement under the Master of Arts degree section.

## Master of Education

The Master of Education degree is awarded upon satisfactory completion of a minimum of 60 points of graduate work. This is a two-year program. Thirty points must be completed under the auspices of Teachers College, including 18 points in Teachers College courses. A maximum of 30 points of graduate credit may be transferred from other recognized institutions. Candidates who have completed a Master of Arts or Master of Science degree through Teachers College must offer a minimum of 45 points of the required 60 points under Teachers College registration.

Candidates admitted to the Ed.M. program are required to offer a minimum of three Teachers College graduate courses in education outside the major program. (In this case, a course is defined as one in which at least 2 points are earned). Equivalent courses for which transfer credit has been granted may be substituted for Teachers College courses upon written petition to the Registrar. Additionally, either a formal essay, a departmental comprehensive examination, or special departmental integrative project is required. Consult departmental advisory statements for additional requirements.

## Doctor of Education/Doctor of Philosophy

Teachers College offers programs of study leading to the Doctor of Education and Doctor of Philosophy degrees. The requirements differ in accordance with the nature of the degree as described below.

The Office of Doctoral Studies provides general information, administrative advice, and service to doctoral students and assists the doctoral committees in their supervision of
the work of candidates for both degrees. Requirements outlined below are described in further detail in the bulletins Requirements for the Degree of Doctor of Education, Requirements for the Degree of Doctor of Education in the College Teaching of an Academic Subject, and Requirements for the Degree of Doctor of Philosophy. Each student should obtain the appropriate bulletin from the Office of Doctoral Studies. Each student is responsible for fulfilling the stated requirements. Doctoral programs are offered in many but not in all areas of specialization in Teachers College. Therefore, a prospective doctoral student should consult a faculty advisor, either through conference or correspondence, concerning programs offered, the degree most appropriate for specific goals, any departmental requirements for admission and programs of study, and application deadlines.

Direct inquiries concerning admission to the Office of Admission of Teachers College and indicate the degree and field of interest in order to receive appropriate information and application forms.

## Doctor of Education

The degree of Doctor of Education emphasizes broad preparation for advanced professional responsibilities through a program based upon extensive study in a specialized branch of the field of education or in an area of instruction. The minimum requirements for this degree are: satisfactory completion of a planned program of 90 points of graduate coursework beyond the Bachelor's degree (at least 45 points of which must be taken through Teachers College registration); submission of a statement of total program indicating periods of intensive study subsequent to the first year of graduate study which accompanies the program plan of study; satisfactory performance on a departmental Certification Examination; and the preparation and defense of a dissertation. Additionally, students are required to complete a minimum of 20 points after taking the certification examination for the first time, including the points taken during the term in which that examination was taken. Some fields of study have additional requirements; consult departmental advisory statements.

Special programs leading to the degree of Doctor of Education for persons preparing for college teaching of an academic subject are offered in several departments. The programs emphasize broad preparation in the candidate's major field, specialized competence in a limited area within that field, and an understanding of the broader problems of education, especially at the college level. The minimum requirements are: satisfactory completion of a planned program of 90 points of graduate coursework beyond the Bachelor's degree; submission of a statement of total program indicating periods of intensive study subsequent to the first year of graduate study which accompanies the program plan of study; satisfactory performance on a departmental

Certification Examination; and the preparation and defense of a dissertation. The point requirement beyond certification is the same for the program as described in the above paragraph. Some fields of specialization have additional requirements such as an examination in one foreign language or in mathematical statistics; consult departmental advisory statements.

Former Teachers College doctoral students who have not registered in the last five years must apply for re-admission through the Office of Admission. Applications for re-admission follow the same processes and standards as those for initial admission. If re-admitted, current degree requirements must be satisfied.

## Continuous Registration Requirement for the Ed.D. Degree

Students are required to be in continuous enrollment for a Teachers College course for a minimum of 3 points, or for the dissertation advisement course, in each fall and spring term, starting with the term following successful completion of the certification examination or following the term in which the dissertation proposal was approved in a departmental hearing, whichever comes first, and continuing until all requirements for the degree are met. (See Requirements for the Degree of Doctor of Education Bulletin for policy on the dissertation advisement course). Certification examinations for students who take the examination in the summer term are not usually evaluated by departments and programs until the fall term. Consequently, these students will not be obligated for continuous enrollment until the following spring term.

The obligation to register continuously ends after the dissertation has received final approval.

## Doctor of Philosophy

The degree of Doctor of Philosophy emphasizes research and intensive specialization in a field of scholarship. Under an Agreement with Columbia University, Teachers College offers programs leading to the Ph.D. degree in designated fields in which the Graduate School of Arts and Sciences of the University does not offer programs, namely in education, including education in the substantive disciplines and certain applied areas of psychology. The minimum requirements for the degree are: satisfactory completion of a planned program of 75 graduate points beyond the Baccalaureate; submission of a statement of total program indicating periods of intensive study subsequent to the first year of graduate study which accompanies the program plan of study; satisfactory performance on foreign language examinations and on a departmental Certification Examination; and preparation and defense of a research dissertation. Some fields of specialization have additional requirements; consult departmental program statements.

Relevant courses completed in other recognized graduate schools to a maximum of 30 points, or 45 points if completed in another Faculty of Columbia University, may be accepted toward the minimum point requirement for the degree. Each degree candidate must satisfy departmental requirements for the award of the M.Phil. degree prior to continuance in the Ph.D. program. These degree requirements are specified in the Requirements for the Degree of Doctor of Philosophy Bulletin, obtainable from the Office of Doctoral Studies.

A Ph.D. candidate must complete all requirements for the degree in not more than seven years. The time limit is six years for those who have received an applicable Master's degree or 30 points of advanced standing. The candidate must register continuously each fall and spring term until all requirements are met unless granted a leave of absence. A candidate who expects to interrupt study for any reason should consult the Office of Doctoral Studies so as to avoid the risk of severing connection with the program. All candidates are required to register in residence in the Graduate School of Arts and Sciences through Teachers College and to pay a fee in the term in which the dissertation is defended.

## Continuous Registration for Dissertation Advisement: Ph.D. Degree

Each Ph.D. student must register continuously for the course in doctoral dissertation advisement offered by the department following enrollment in the department's designated dissertation seminar course(s) or following the term in which the dissertation proposal was approved, whichever comes first, and continuing until all requirements for the degree are met. (See Requirements for the Degree of Doctor of Philosophy Bulletin for policy on the dissertation advisement course.) Continuous registration for doctoral advisement is required each fall and spring term, whether or not the student is in attendance, and in the summer term when special permission has been granted to schedule an oral examination on the dissertation. Registration for TI 8900, Dissertation Defense: Ph.D. is required for the term in which the oral defense is held. See Fees and General Offerings sections for further details. The obligation to register for dissertation advisement ends after the dissertation has received final approval.

## Postdoctoral Study

The facilities of Teachers College may be made available to persons holding the doctoral degree from approved institutions who desire to spend a period in advanced research or study. Application for admission to postdoctoral study for transcript credit should be made to the Office of Admission. Persons who do not wish transcript credit may apply for Visiting Scholar status. Refer to the Visiting Scholar section in the Policies and Procedures section of this bulletin for more information.

## REGISTRATION PROCEDURES

Students seeking course credit must be admitted by the Teachers College Office of Admission. For details, please refer to the section on Admission. Former Teachers College degree students who wish to pursue a degree program and have not been in attendance during the past five years must apply for re-admission in the Admission Office well before the registration dates. Those not in attendance within the last five years who do not desire degree candidacy should go directly to the Office of the Registrar.

Course registration may be completed by use of Teachers College Touchtone Services or online via myTC. Limited in-person registration is available during dates announced in the Academic Calendar.

## Teachers College Touchtone Services and

 the Student Information SystemAll students are expected to register via the telephone through Touchtone Services or on the web through the Student Information System. It is the responsibility of each student to obtain advisement and approval for their course selections from their academic advisor prior to registering. Registering for classes that your advisor has not approved can seriously compromise your ability to fulfill degree requirements and may have unintended financial consequences. Students must also obtain permission from the course instructor for any course listed in the Schedule of Classes that requires instructor approval. The telephone number to access Touchtone Services is (212) 678-3200. Students may connect to the Student Information System through the TC portal myTC. Both systems are normally available Mondays-Saturdays from 8 a.m. to 11 p.m. Instructions for registration are available in the Registration Information Section in the Schedule of Classes for each term.

Whenever course enrollment has been entered on the computer registration system, the student is responsible for payment of the assessed charges unless the student follows the procedures for a change of program as outlined in the Schedule of Classes and in accordance with the dates listed in the Academic Calendar. Failure to attend a course does not constitute an automatic withdrawal. (See section on Changes in Registration and Withdrawal.)

Each registrant is expected to assume a major responsibility in program planning. A careful study of the general degree requirements and maximum point loads outlined in this Catalog, special departmental bulletins, and advisory recommendations should be taken into consideration.

During the first day of in-person registration, faculty advisors will be available to consult with students and approve their programs; however, during the late registration period, advisors will be available from 3 p.m. to 5 p.m. on weekdays.

Teachers College students must have written permission of the Registrar before registering in any program or institution outside the College. Additionally, students are not permitted to be enrolled concurrently in two degree programs or schools within the University or the College.

## Maximum Point Loads

The number of points (credits), a point being the equivalent of a semester hour that a course carries per term, is given in parentheses following the course title. No more than 9 points may be taken during a summer session and no more than a total of 16 points in the summer term. No more than 18 points may be taken during the fall or spring term; students who hold full-time positions are discouraged from enrolling for programs in excess of 8 points each fall and spring term.

## Certification of Part-Time/Full-Time Attendance

Enrollment status certification is based upon the number of points for which a student is registered per term. During the fall, spring and summer terms, "full-time" status is accorded to students registered for 12 or more points per term. Students enrolled for fewer than 12 points ( $0-11$ points) are considered "parttime." "Half-time" status is based on enrollment of 6-11 points per term. Students registered for fewer than 6 points are accorded "less-than-half-time status." During the summer term, enrollment status is determined by the cumulative number of points in both Session A and B. For "full-time" status, students must register for a combined load of at least 12 points, with no more than 9 points in one summer session.

Students taking fewer than 6 or 12 points in a term may be certified as full-time or half-time if they can present an approved Certificate of Equivalency (COE) form. A Certificate of Equivalency is only approved when a student is working on an academic activity that is directly related to a student's degree program. The form is available from the Office of the Registrar and must be recommended by the student's advisor and approved by the Registrar. A Certificate of Equivalency is only granted for activities that are directly related to the degree program and satisfies a requirement for the degree program. No student will be certified for full-time, half-time, or part-time status unless he or she is enrolled for that term in some form and, if necessary, has filed a Certificate of Equivalency in the Office of the Registrar during the first two weeks of the term. Doctoral students may check with the Office of Doctoral Studies regarding personal exemption or waivers. Students cannot be certified for future dates of attendance.

Change in Registration and Withdrawal Notice of any change in your registration, including adding/dropping courses, changes of points in variable point courses, or of total withdrawal from the College, must be given to the Registrar in writing or completed through the online registration systems: Touchtone Services or the Student Information System. Instructions for changes in registration and withdrawal through Touchtone Services or the Student Information System are outlined in the Registration Information section in the Schedule of Classes or may be obtained from the Office of the Registrar.

The last date for changes in registration is indicated in the Academic Calendar. After this deadline, courses may not be added but a partial refund of tuition fees for withdrawal from courses may be authorized by the Registrar. Fees are not subject to this reduction. Reduction of tuition based on a sliding scale is calculated from the day the Registrar receives written notice from the student or the withdrawal is processed through Touchtone Services or the Student Information System. The sliding scale is outlined in the Registration Information section in the Schedule of Classes on the TC-Web for each term.

The deadline for making changes in points in variable-point courses will extend until the class has met four times; dates are indicated in the Academic Calendar.

Courses with special dates must be dropped before the course begins to receive full tuition credit. There is no reduction of tuition for special date classes once the course begins or for fee-based courses in art, music and dance after the close of the change of program period. Students who have registered for workshops must withdraw from a workshop prior to the beginning of the workshop. No tuition rebates will be granted for a workshop once it has begun.

Students who are deficient in their attendance or who perform their class duties unsatisfactorily may be required at any time to withdraw from a course, upon recommendation by the course instructor to the Registrar; in extreme cases, this may mean withdrawal from the College.

For grading symbols covering withdrawals, see Grades.

## Late Registration

A late registration fee of $\$ 100$ will be assessed for any registration requests approved after the last date for change of program; dates are indicated in the Academic Calendar.

## Tuition

Tuition and fee rates are set annually by the Teachers College Board of Trustees. Beginning in fall, for the 2011-2012 academic year, tuition for all regular courses is $\$ 1,231$ per point. Noncredit courses vary in rate, usually depending on the minimum number of points for which the particular course is offered and the special services provided (see course description).

Columbia University tuition is assessed per point or at a flat rate determined annually by the University's Board of Trustees. Rates at each school within the university may vary. Consult the Registrar for current rates.

Total tuition and fees are determined based on the number of points for which the student has registered. All tuition and fees (registration, service, workshops and all miscellaneous related expenses) charged are due and payable in full by the official published deadline date. Registrations submitted after the published due date are due upon registration. The chart below (labeled, Other Fees) highlights the fees charged by the College.

## Payment Options

Various forms of payment are accepted for tuition and fees and may be used individually or in combination. Teachers College accepts checks, money orders, and cash. A deferred payment plan, tuition exemption, third party billing agreements, and financial aid are also available to finance a Teachers College education. Some restrictions may apply.

Personal Checks, Cashier Checks or Money Orders-Must be made payable to Teachers College. These types of payments can either be submitted in person, placed in the drop box, or mailed to the Office of Student Accounts: 525 West 120th Street, Box 305, New York, NY 10027. The drop off payment box is located at the door of the Office of Student Accounts, 133 Thompson Hall. Do not place cash in this box. Please write student identification number and a valid daytime telephone number on the face of the check or money order. Online feefree ACH (checking or savings account) payments are also accepted. Online payments can be made by accessing the myTC Portal at http://my.tc.edu. Returned checks are assessed a return-check and subject to collection fees, if necessary.

Cash Payments-Must be made in-person at the Office of Student Accounts, 133 Thompson Hall. During the academic year, the Office of Student Accounts staff is available Monday through Thursday 9:00 a.m. until 6:00 p.m. and Friday 9:00 a.m. until 5:00 p.m.

Deferred Payment Plan-Students may choose to participate in the Deferred Payment Plan during the fall and spring semesters. The Deferred Payment Plan allows students to spread total tuition and fees, less any aid disbursed, over three equal installments during the semester. An agreement between the student and Teachers College must be completed with a representative of the Office of Student Accounts no later than September 9, 2011 for the fall semester and January 20, 2012 for the spring semester. A $\$ 50$ fee is required to participate in the plan and the first installment is due at the time the student signs the agreement. Tentative installment dates are listed below:

## Fall Semester

First Payment on or before Sept. 9, 2011

| Second Payment | October 7, 2011 |
| :--- | :--- |
| Third Payment | November 7, 2011 |

## Spring Semester

First Payment on or before Jan. 20, 2012

| Second Payment | February 16, 2012 |
| :--- | :--- | Third Payment $\mid$ March 16, 2012

Failure to remit payment, as scheduled, in the Deferred Payment Plan will result in the assessment of a late payment penalty of $11 / 3$ percent on any unpaid balance.

Tuition Exemption-Students employed at the University may be eligible for tuition exemption. Human Resources must authorize tuition exemption forms with a valid HR personnel signature. Authorized Tuition Exemption forms must be submitted in person no later than September 20, 2011 for Fall 2011 and January 31, 2012 for Spring 2012. If a student registers late, payments including tuition exemption forms are due at the time of the late registration. Various fees including, but not limited to, course fees, college fees, health service fees, medical insurance, and late registration fees are not covered by tuition exemption. The student should be prepared to remit payment for these fees on the official tuition due date.

## Third Party Agreements-Students enrolling

 under a third party agreement must submit an authorization form to the College for approval each term/semester. A third party is usually an outside agency (not an individual) that agrees to pay all or part of the charges incurred by a particular student. The authorization form must include the student's name, relevant semester(s), and the total amount of tuition and fee charges that the third party is willing to pay. The form must be signed by an official of the third party agency. A third party agreement between the College and the agency must be completed each term/semester before the start of the term/semester.Financial Aid—If all required applications and documentation have been filed with the Office of Financial Aid by the required deadline, financial aid awards should be available at the time of registration. Since tuition and all fees are due at the time of in-person registration, late payment penalties will be assessed on any outstanding balance as described under the Late Payment Penalties section of this bulletin. For further information about financial aid, review the section entitled Financial Aid.

## Late Payment Penalties

Failure to clear all account balances can result in late payment penalties. An initial Late Payment Fee of $\$ 50$ will be charged on any outstanding balance during the first billing period. A $11 / 3$ percent monthly ( 16 percent annually) Late Payment Penalty will be assessed on any outstanding balance thereafter. In addition, failure to make timely payment of housing charges may result in eviction. Furthermore, unpaid accounts may be referred to a collection agency or law firm for collection.

The College reserves the right to withhold grades, transcripts, diplomas and other services, including registration, from students whose financial obligations have not been fully satisfied. In the event Teachers College refers any unpaid balance for collection and/or legal action, the student will be obligated to pay all related costs including but not limited to attorney's fees and collection costs.

## Withdrawal from Classes

By registering for classes, a student has entered a legal and binding contract to pay all tuition, fees, and penalties charged by Teachers College.

When a student withdraws from Teachers College or from individual classes, the tuition charges originally assessed may be reduced, based on the date of withdrawal. Failure to attend classes does not constitute an automatic withdrawal; students must file an application to withdraw in the Office of the Registrar or through the Touchtone Services or on the myTC Portal in a timely manner. The percentage of reduction is based on the date of withdrawal and will be determined according to the following schedule:

## Fall 2011

| Withdrawal Dates | Percent of refund |
| :--- | :---: |
| before September 21 | $100 \%$ |
| *September 21-23 | $80 \%$ |
| September 24-30 | $75 \%$ |
| October 1-7 | $70 \%$ |
| October 8-14 | $65 \%$ |
| October 15-21 | $55 \%$ |
| October 22-28 | $50 \%$ |
| Oct. 29- Nov. 4 | $40 \%$ |
| after November 4 | $0 \%$ |

## Spring 2012

Withdrawal Dates
before February 1, 2012
*February 1-3

## Percent of refund

100\%

- $80 \%$

February 4-10 75\%
February $11-17 \quad 70 \%$
February 18-24 65\%
Feb. 25 - Mar. 2 55\%
March 3-9 50\%
March 10-16 40\%
after March 16 0\%

* $100 \%$ refund is extended through the end of the official drop/add period each term (see academic calendar)

Only tuition charges are subject to this reduction. For further information on withdrawal policies, see the section entitled Change in Registration and Withdrawal.

## Student Refunds

Proceeds originating from student aid programs in excess of all student account charges-tuition, fees, monthly housing, and other related expenses-will be mailed to the student. Students should make sure that their address is current in the myTC Portal. All required financial aid applications and documentation must be filed with the Office of Financial Aid by the published deadline, and all financial aid eligibility requirements must be met. For further information about financial aid, review the section entitled Financial Aid.

## Financial Aid (Loans)

Many students at Teachers College finance their educational expenses with federally guaranteed loans under the Stafford Loan program. Students who are planning to apply for these loans may begin the process as early as January for the following fall term and September for the following spring term. Students may contact the Office of Financial Aid for more details and processing requirements.

Federal income tax deductions of educational expenses of professional educators and other professionals.
Under the current Internal Revenue code, certain expenses incurred for education may be deductible for federal income tax purposes. Possible deductions for teachers are described in some detail below. Similar deductions apply to other professionals engaged in education. Students are advised to consult a tax advisor concerning eligibility for such deductions. For teachers, expenses incurred for education are deductible for federal income tax purposes if the education: (1) maintains or improves skills of a teacher, or (2) meets the express requirements of the teacher's employer, or the requirements of an applicable law or regulation, imposed as a condition to the retention by a teacher of the student's employment
relationship, status, or compensation. No deduction is allowed for educational expenses (even if they meet the above requirements) if they are incurred to satisfy minimum educational requirements for qualification as a teacher or to qualify a teacher for a "new trade or business."

In respect to teaching, a "new trade or business" does not include educational employment involving the same general type of teaching and related duties as performed prior to the education. Under the Treasury Department releases, the following changes in teaching activities do not constitute a "new trade or business":

- Elementary to secondary school classroom teacher.
- Classroom teacher in one subject (e.g., mathematics) to classroom teacher in another (e.g., science).
- Classroom teacher to guidance counselor.
- Classroom teacher to principal.

Educational expenses which may be deducted include those for travel, meals, and lodging while away from home if the travel is primarily to obtain education.

The foregoing is based upon information released by the United States Treasury Department in Treasury Department Regulations \#1.162-5. It is the responsibility of the student to establish that the educational program qualifies for deductions in his or her case and to determine and document the amount of the deduction.

| Other Fees |  |
| :---: | :---: |
| Teachers College fee: | \$388 |
| Teachers College Research fee: | \$388 |
| Health Service fee: | Fall: $\$ 450$ Spring: $\$ 450$ |
| Medical Insurance fee: (Basic) | $\begin{array}{r} \text { Fall: } \$ 990 \\ \text { Spring: } \$ 1,522 \end{array}$ |
| (Comprehensive) | $\begin{array}{r} \text { Fall: } \$ 1,431 \\ \text { Spring: } \$ 2,207 \end{array}$ |
| Transcript fee: (One-time only charge) <br> Application fee: <br> (non-refundable and payable at time of application) | $\$ 35$ $\$ 65$ |
| Library Research fee: <br> (for non-college users) per month | \$100 |
| Continuous Doctoral Advisement registration fee: | \$3,693 |
| Ph.D. Oral Defense fee: | \$5,006 |
| Late registration fee: | \$100 |
| Late application fee for conferring of degrees: | \$25 |
| Special examination fee: (each course) | \$25 |
| Student identification card replacement fee: | \$25 |
| Late payment fee (flat fee): (monthly fee) $1-1 / 3 \%$ ( $16 \%$ annually) | \$50 |
| Returned check fee: | \$20 |
| Deferred payment plan fee: | \$50 |
| Tuition deposit fee: | \$300 |
| Fees listed here and elsewhere throughout this catalog are reviewed periodically and are subject to change without prior notice. Additional fees may be added. Spring medical insurance runs through August 31. |  |

## FINANCIAL AID

The Office of Financial Aid recognizes that the pursuit of a graduate education includes a financial commitment for the student and family. We also know that identifying and securing financial resources plays a significant role in planning for college. To this end, we are committed to reducing financial barriers and offering students the best financial aid package possible in the form of institutional scholarships, federal grants and student loans, and employment opportunities. Please visit the website at www.tc.edu/financialaid/ for further information on the financial aid process, grants and internal and external scholarships.

## Scholarships and Grants

Each year Teachers College awards over $\$ 8$ million of its own funds in scholarship and stipend aid, and $\$ 2$ million of endowed funds to new and continuing students. Most scholarship awards are made on the basis of academic merit. Scholarships are applied to tuition only, and students should expect to provide additional funds for the tuition balance, fees, medical insurance, academic and living expenses.

## Please note:

- All scholarship awards must be used in the year awarded and may not be transferred to a future academic year.
- All scholarship recipients must successfully complete a minimum of 9 points per academic year in order to be eligible for scholarship awards in future academic years.
- Full-time Teachers College and Columbia University affiliated employees (including dependents and spouses) who are eligible to receive 12 points or more of tuition exemption annually may not receive Teachers College scholarship aid, unless the scholarship they receive is derived from a publicized academic competition (i.e., W. Sindlinger Writing Award) in which recipients have been selected via committee.


## Departmental Supplemental Scholarships

 These scholarships are available to students enrolled in teacher education/certification programs. Students are nominated by the program faculty to a department committee. Awards are made based upon merit.
## Minority Scholarships

The Teachers College Minority Scholarship Program seeks to promote the enrollment of a diverse student body at the College, including individuals from historically underrepresented groups. To be eligible, students must be U.S. citizens or permanent residents and must complete the Teachers College Scholarship Application. In making awards under this program, consideration will be given to all students who have self-identified on the Teachers College Financial Aid and Scholarship Application either as members of a federally recognized U.S. ethnic minority group or as having a federally recognized disability. The academic program faculty scholarship commit-
tees which make these awards also take into consideration a range of other factors related to the enrollment of a diverse student body at the College, including: geographic origin, socioeconomic status (e.g., evidence of social and economic disadvantage), and family and educational background (e.g., first generation college, enrollment at a historically minority serving institution, etc.).

## Endowed Scholarships

Endowed scholarships are provided through the generosity of donors' contributions. Many of these are in support of students in particular programs. Faculty committees select the award recipients based upon the criteria designated by the donor. Some endowed scholarships are available to students across many programs. For these, faculty nominate students to a College-wide selection committee, which makes the final award decisions. There are over 300 endowed scholarships.

## General Scholarships

Based upon merit, all students are eligible for Teachers College General Scholarships. Program faculty committees make these award decisions.

## Graduate Assistantships

Students who are employed as graduate assistants earn salary plus a tuition scholarship. Students may be awarded up to 3 points per semester, with a maximum of 6 points per academic year (fall, spring, summer). Points may be used during the semester awarded. The points may not be transferred to a future academic year.

Grant-in-Aid
Grant-in-Aid is awarded to doctoral students during the last two semesters of graduate work, taking both merit and need into consideration. Students must demonstrate considerable loan indebtedness incurred while at Teachers College. International students are required to seek approval from the International Student Advisor. Faculty recommendations in support of Grant-in-Aid applications are required. Applications are available in the Office of Financial Aid or at www.tc.edu/ financialaid/index.asp?ID $=$ forms\&info $=$ forms. The Grant-in-Aid committee meets monthly from September to June to make award decisions.

## International Student Scholarships

Teachers College International Student Scholarships are available to international students only and is a competitive process. Program faculty recommend students for these awards to their academic program and departmental scholarship committees.

Stipends, Internships, Fellowships and Research Assistantships Stipends, internships, fellowships, graduate and research assistantships are also available through the program faculty. These provide students with valuable experiences which
enrich academic growth and development, as well as income which may be applied towards college and living expenses.

This is a partial list of endowed scholarships.

## Jaffe Scholarship

This scholarship will support Peace Corps Fellows. The Peace Corps Fellows Program nominates candidates. Only returned Peace Corps volunteers are eligible to apply to the Peace Corps Fellows Program.

Jewish Federation for the Education of Women (JFEW)
For two full-time female pre-service science and math education students willing to teach for 2 years in NYC public schools. This is a full tuition scholarship that is available to new students only. Financial need is required.

Peace Corps Fellows Program
The Peace Corps Fellows Program offers partial tuition remission on a competitive basis to returned Peace Corps Volunteers. While enrolled part-time in selected areas of study leading to an M.A. degree, Peace Corps Fellows are employed full-time by the New York City Department of Education and teach in New York City Public Schools. Additional information may be obtained by visiting the website at www.tc.edu/pcfellows, by calling the Peace Corps Fellows Program Office at (212) 678-4080 or by writing to the Program at Box 90, Teachers College, Columbia University, 525 West 120th Street, New York, NY 10027.

## Arthur Zankel Urban Fellowship Program

The Arthur Zankel Urban Fellowship is a financial aid award in the amount of $\$ 10,000$ per academic year for Teachers College students to work with inner city youth. All Zankel Urban Fellows will be required to perform an internship of a minimum of 5 hours per week in one of several approved educational programs intended to benefit disadvantaged inner city youth. The list of approved programs is maintained by the TC Office of School and Community Partnerships. In addition, Zankel Fellows are also required to participate in a full year (fall and spring) service learning seminar which carries one academic credit. The course will meet periodically throughout the year. It will provide an academic context to ground internship experiences and a set of cohort experiences for all Zankel Fellows.

## Selected External Scholarships, Fellowships and Grants

- American Association of School Administrators: Graduate Student Scholarships This scholarship is open to graduate students who intend to pursue the public school superintendency as a career. More information is available at www.aasa.org.
- American Educational Research Association (AERA) —www.aera.net
- ATET Labs Fellowships

These awards are available to outstanding minority and women students who are U. S. Citizens or Permanent Residents and who are pursuing Ph.D. studies in computer and com-munications-related fields. More information is available at www.research.att.com/academic/ Programs.html

- Charlotte W. Newcombe Doctoral Dissertation Fellowships
These fellowships are designed to encourage original and significant study of ethical or religious values in all fields of the humanities and social sciences. More information is available at www.woodrow.org/newcombe/.
- Dale Seymour Scholarships,

Grades K-12 Teachers
Awards given to persons currently working at the grades $\mathrm{K}-12$ level who are interested in improving their mathematics background to provide, in turn, better math instruction to their students. More information is available at www.nctm.org/about/met/.

- Edward G. Begle Grant for ClassroomBased Research
Supports collaborative classroom-based research in pre-college mathematics education. More information is available at www.nctm.org/about/met/begle.htm.
- Eleanor Roosevelt Teacher Fellowships Teacher Fellowships are available to female $\mathrm{K}-12$ public school teachers as individuals or as lead members of teams. More information is available at www.aauw.org/fga/.
- Emerson Charitable Trust

Offers grants for community funds, higher education, cultural programs, hospitals and health agencies, public policy organizations and youth agencies for the arts, education, federated giving programs, higher education, public policy and research, youth services. More information is available at www.emersonelectric.com.

- Ernest Duncan Scholarships,

Grades K-12 Teachers
Awards are given to persons currently working at the grades K-6 level to improve their own professional competence as a classroom teacher of mathematics. More information is available at www.nctm.org/resources.

- Ford Foundation Minority Doctoral Fellowships Three-year predoctoral and 12 month dis-
sertation fellowships. More information is available at www.nationalacademies.org.
- Gates Millennium Scholar Program The Foundation seeks to increase the number of African-Americans, American Indians/Alaska Natives, Asian Pacific Americans, and Hispanic Americans enrolling in and completing undergraduate and graduate degree programs. More information is available at www.gmsp.org.
- The Hispanic Scholarship Fund The Hispanic Scholarship Fund (HSF) is the largest Hispanic scholarship-granting organization in the nation. HSF recognizes and rewards outstanding Hispanic students in higher education throughout the United States and Puerto Rico. More information is available at www.hsf.net.
- Jeanne S. Chall Research Fellowship The Jeanne S. Chall Research Fellowship is a grant established to encourage and support reading research by promising scholars. More information is available at www.reading.org/awards.
- Math for America Newton Fellowship Program
Newton Fellowships are available to mathematically sophisticated individuals who are interested in using their talents to make a difference in the lives of young people. MFA seeks recent college graduates and mid-career professionals who can demonstrate a strong interest in teaching, have a bachelor's degree with substantial coursework in mathematics, and are willing to commit to a five-year program that includes one year of full-time graduate study and four years of teaching mathematics in New York City high schools. More information is available at www.mathforamerica.org/.
- Mellon Fellowships in Humanistic Studies These fellowships are designed to help exceptionally promising students prepare for careers of teaching and scholarship in humanistic disciplines. More information is available at www.woodrow.org/mellon/.


## - National AMBUCS Scholarships

 for TherapistsGraduate students who wish to pursue degrees in physical therapy, occupational therapy, speech language pathology, or hearing audiology. More information is available at www.ambucs.com.

- National Science Teachers Associationwww.nsta.org/programs/.
- New York State Tuition Aid-BOCES ITI-BE Awards are made to persons in Bilingual Education/TESOL. Please contact the director: Dr. Maria Eugenia Valverde, Eastern Suffolk BOCES ITI-BE, 350 Martha Avenue, Bellport, NY 11713.
- NSF Graduate Fellowships

Offers three-year graduate research fellowships in science, mathematics, and engineering, including Women in Engineering and Computer and Information Science awards. More information is available at www.ehr. nsf.gov/dge/programs/grf or email: nsfgrfp @orau.gov.

- The Paul and Daisy Soros Fellowships for New Americans
The Fellowships are grants for up to two years of graduate study in the United States. The recipients are chosen on a national competitive basis. More information is available at www.pdsoros.org.
- Sinfonia Foundation Research Assistance Grants
These grants are offered to candidates conducting research in American music or music in America. More information is available at www.sinfonia.org/SEF.
- Spencer Dissertation Fellowships The Dissertation Fellowship Program for Research Related to Education assists young scholars interested in educational research in the completion of the doctoral dissertation. More information is available at www.spencer.org.


## Student Loans

Federal student loans are available to Teachers College students. To qualify for any of the federal education loan programs, an applicant must be a U.S. citizen or an eligible non-citizen and must be enrolled at least half time (6 points or the equivalent) in a degree program. International students may qualify for creditworthy loans from a bank by securing a cosigner who is a U.S. citizen or permanent resident. Consult with a financial aid counselor for more information.

If a student receives a federal loan, she/he must complete a Loan Entrance Interview before receiving the initial funds, and a Loan Exit Interview before graduating, leaving Teachers College, or dropping to less than half-time status. The Entrance Interview will review the terms and conditions of the loan, and the Exit Interview will cover repayment, deferment and consolidation options. Loans are processed during the semester a student is enrolled. For additional information on student loans, please visit our website at www.tc.edu/financialaid/.

The following loans require a Free Application for Federal Student Aid (FAFSA), a separate loan authorization form, a promissory note, and a loan entrance interview. To ensure consideration for the Federal Perkins Loan and the Federal Work-Study programs, it is recommended that the FAFSA be filed by March 1st. In order for Stafford Loans to be processed in time for the beginning of the fall semester, applicants are urged to file the FAFSA by April 15th.

## Federal Perkins Loan

Federal Perkins Loans are awarded on the basis of exceptional need to students from a limited amount of federal funds allocated to Teachers College. Students must be enrolled at least half-time ( 6 points or the equivalent). The loan is made up of government funds with a share contributed by the college. Teachers College is the lender and repayment is made to the school. Payment of both interest and principal is deferred until nine months after leaving Teachers College or dropping to less than half time. The annual fixed interest rate of 5\% begins to accrue at the same time payments begin. Repayment may take up to 10 years.

William D. Ford Direct Loan Program A subsidized loan is awarded on the basis of financial need. The student will not be charged any interest before they begin repayment or during authorized periods of deferment. The federal government subsidizes the interest during these periods. The current interest rate is fixed at $6.8 \%$.

An unsubsidized loan is not awarded on the basis of need. Students accrue interest from the time the loan is disbursed until it is paid in full. If the interest is not paid in full before repayment begins, the amount of outstanding interest will be capitalized (it will be added to the principal amount of the loan), and additional interest will be based upon the higher amount. The current interest rate is fixed at 6.8\%.

Graduate PLUS Loans are available to TC students. Graduate PLUS loans offer a fixed interest rate of $7.9 \%$. Students can borrow up to the cost of attendance minus other financial aid received. In order to qualify, students must file a FAFSA and meet all federal guidelines to receive student aid and not have an adverse credit history. Repayment begins on the date of the last disbursement of the loan.

For periods of study that are less than an academic year, the amounts students can borrow may be less than the annual maximum. The exact amount of loan eligibility will be listed in the award letter. Generally, graduate students can borrow up to $\$ 20,500$ each academic year. (Only $\$ 8,500$ of this amount may be a subsidized Stafford Loan). Students may receive less than the yearly maximum if they receive other financial aid that is used to cover a portion of the cost of attendance. Graduate Stafford Loan Limits Generally, for graduate or professional students, the total permissible outstanding debt from all Stafford Loans (subsidized and unsubsidized) combined is $\$ 138,500$. Only $\$ 65,500$ of this amount may be in subsidized loans. The graduate debt limit includes any Stafford Loans received for undergraduate study.

## Other Loans

There are several student loan programs administered by private institutions that pro-
vide funds to students who do not qualify for federal or need-based loans, or who may need additional funding. They are often available from banks, require a credit check, and in some cases, a co-signer and processing fee. Securing a co-signer may result in lower interest on the loan. For information on banks that have preferred lending agreements with Teachers College, please visit our website at www.tc.columbia.edu/financialaid/.

## Loan Cancellation and/or Deferment

There are several incentive programs offered by various federal, state and local government agencies that will defer and/or cancel a portion of a student's federal education loan debt, usually Federal Perkins Loans but sometimes Federal Stafford Loans as well.

The most common cancellations are Federal Perkins Loans and qualifying Federal Stafford Loans for teachers working full-time in "federally designated" teacher shortage areas. These federally designated schools are located in school districts that qualify for funds under Chapter 1 of Title I of the Elementary and Secondary Education Act. However, not all Chapter 1 -funded schools are on the "federally designated" list.

For a complete explanation of school and loan eligibility requirements as well as searchable databases of qualifying schools, please visit the Department of Education websites listed below. These websites also contain details about loan cancellation and/or deferment.

- New York City Department of Education Incentive Programs: www.teachny.com
- United States Department of Education Teaching Service Cancellation/Deferment Options: http://studentaid.ed.gov/ PORTALSWebApp/students/english/ teachercancel. jsp ? tab $=$ repaying
- United States Department of Education list of federally designated teacher shortage areas: www.ed.gov/about/offices/list/ope/ pol/tsa.pdf
- United States Department of Education searchable site for low-income schools eligible for Federal Perkins Loan cancellation: http://studentaid.ed.gov/ PORTALSWebApp/students/english/ cancelperk.jsp?tab = repaying

The following is a list of state education departments for states in geographic proximity to Teachers College:

- New York (NY)

New York State Education Department
89 Washington Avenue
Albany, New York 12234
(518) 474-5915
http://www.nysed.gov

- New Jersey (NJ)

New Jersey Department of Education
P. O. Box 500

Trenton, NJ 08625
(609) 292-4469
http://www.state.nj.us/education

- Connecticut (CT)

Office of Public Information
Connecticut State Department of Education 165 Capitol Avenue
Hartford, CT 06145
(860) 713-6548
http://www.state.ct.us/sde

- Pennsylvania (PA)

Pennsylvania Department of Education
333 Market Street
Harrisburg, PA 17126
(717) 783-6788
http://www.pde.state.pa.us

## Federal TEACH Grant

The Teacher Education Assistance for College and Higher Education (TEACH) Grant Program provides up to $\$ 4,000$ a year in grant assistance to students who are completing or who plan to complete master's level coursework to begin a career in teaching.

In exchange for the grant, a student must sign an Agreement to Serve as a full time teacher at certain low-income schools and with certain high-need fields for at least four academic years within eight years after completing (or ceasing enrollment in) the course of study for which the candidate received a grant. TEACH Grant recipients must submit evidence of employment as certified by the chief administrative officer of the school upon completion of each year of teaching service.

If the grant recipient fails or refuses to carry out his or her teaching obligation, the amount of the TEACH Grants received are treated as an unsubsidized Direct Loan and must be repaid with interest.

Eligibility:
To be eligible for a TEACH Grant, you must:

- Be a U.S. citizen or eligible non-citizen
- Be enrolled in coursework or plan to complete coursework in a TEACH Grant eligible master's degree program (see list below)
- Maintain Satisfactory Academic Progress and meet all other institutional requirements for maintaining enrollment
- Complete TEACH Grant counseling and sign a TEACH Grant Agreement to Serve each year
- Complete a FAFSA, although you do not have to demonstrate financial need to be eligible

TEACH Grant- Eligible Programs at TC:

- Art
- Bilingual Education
- English (Grades 5-9 and 7-12)
- English as Second Language
- Intellectual Disability/Autism
- Languages other than English
- Mathematics (Grades 5-9 and 7-12)
- Music
- Physical Education
- Reading and Literacy
- Sciences (Grades 5-9 and 7-12)
- Special Education (Bilingual)
- Special Education (5-9 and 7-12)
- Teaching Students with Disabilities

Note: The field you teach in must be a highneed field in the state where you teach in order to satisfy your service requirement. Documented high need fields website: http://www.ed.gov/about/offices/list/ope/pol/ tsa.doc

Schools serving low-income students search: http://www.tcli.ed.gov/CBSWebApp/tcli/TCLI PubSchoolSearch.jsp

## Student Employment

Opportunities for student employment are available at Teachers College. Students should inquire at the Teachers College Human Resources Office or visit the website at www.tc.edu/administration/hr and with program faculty for a list of current vacancies. Many positions offer tuition exemption or scholarship points.

## Federal Work Study

Federal Work Study (FWS) is a need-based federal financial aid program through which the federal government provides funds to Teachers College for the purpose of providing job opportunities to our eligible students. Funds are allocated to several Teachers College departments and offices which may then create and offer jobs to FWS awardees. (Not all departments and offices have FWS funds with which to offer FWS jobs. FWS awards may be used only in those departments/offices which have an FWS budget).

FWS jobs allow awardees to earn wages which help them to cover various education-related expenses like books and supplies, transportation, etc. The amount of FWS which appears on the Financial Aid Award Letter is an earning eligibility; it is not a guarantee of wages to be earned. Rather, it is a maximum limit on the amount of FWS funds a student may earn should they choose to participate in the program. Students are paid only for actual hours worked. Placement in an FWS position is contingent upon availability of jobs and funding, as well as on a student's skills, experience, and schedule. Below is a list of basic rules and regulations that students must be aware of while employed under the FWS program.

As an FWS employee:
(1) A student must register for a minimum of 6 points or the equivalent each semester while employed, exception: If a continuing student wishes to work over the summer, s /he may do so without being registered for classes, if a student is returning in the following fall semester as a half-time (or equivalent) student. If a continuing student is not returning in the following fall, s/he must be at least half-time during the summer in order to work and can only work until June 30th.
(2) The suggested number of hours to work while classes are in session are no more than 20 hours per week during the fall and spring semesters, and up to 30 hours per week during the summer, winter, and spring breaks.
(3) A student may not work after his/her date of graduation.
(4) A student must complete and submit a Federal Work Study Agreement for every academic year in which $s /$ he participates in the FWS program.
(5) A student's FWS award is valid for the fiscal year (July 1, 2011 through June 30, 2012). New students are eligible to use their awards after they have registered for classes and the Fall/Spring semester has begun. Continuing students are eligible to begin using their awards as soon as they have received a 2011-2012 award letter which includes an FWS award, but no sooner than July 1st of the year of their award.
(6) In order to have a FWS award (and other need-based awards) renewed in future years, students must file a Free Application for Federal Student Aid (FAFSA) for every academic year.

## How to Apply for Aid for the

2011-2012 Academic Year
To be eligible for federal financial aid you must meet the following criteria:

- Be a United States citizen or permanent resident.
- Be enrolled in at least 6 points in a degree program.
- Make satisfactory academic progress towards a degree.
- Not have been convicted of any offense under federal or state law involving the possession or sale of a controlled substance.
- Register with selective service administration if you are a male.
- Not be in default on a loan or owe a payment of federal funds.
U.S. citizens and Eligible non-citizens All students are encouraged to file a 20112012 Free Application for Federal Student Aid (FAFSA), regardless of eligibility for Federal Aid. The FAFSA is available at the Office of Financial Aid by January of each year. Students can also find and file the FAFSA on the web at www.fafsa.ed.gov. Teachers College's institutional code is G03979.

After filing the FAFSA, students will receive a Student Aid Report (SAR) which must be reviewed for accuracy, and necessary corrections made. If there are questions, contact the Office of Financial Aid. Students may also be required to submit copies of their federal tax returns and other supporting documents to verify the information on the FAFSA.

## New Applicants

Students interested in applying for scholarships will need to complete the Teachers College scholarship application (Please check the Financial Aid website for instructions and deadlines for completing this application form). Several scholarships do require demonstration of financial need. New students must file a FAFSA to be considered for federal aid.

## Continuing Students

Students interested in applying for scholarships will need to complete the Teachers College Scholarship application. (Please check the Financial Aid website for instructions and deadlines for completing this application form). Continuing students must file the FAFSA for each year that they wish to be considered for federal aid.

International Students
International students should review the
Application Procedure for International Students and the scholarship opportunities for international students.

How to Apply for Aid for the 2012-2013 Academic Year To be eligible for federal financial aid you must meet the following criteria:

- Be a United States citizen or permanent resident.
- Be enrolled in at least 6 points in a degree program.
- Make satisfactory academic progress towards a degree.
- Not have been convicted of any offense under federal or state law involving the possession or sale of a controlled substance.
- Register with selective service administration if you are a male.
- Not be in default on a loan or owe a payment of federal funds.
U.S. citizens and Eligible non-citizens

All students are encouraged to file a 2012 -
2013 Free Application for Federal Student Aid (FAFSA), regardless of eligibility for Federal Aid. The FAFSA is available by January of each year at the Office of Financial Aid. Students can also find and file the FAFSA on the web at www.fafsa.ed.gov. Teachers College's institutional code is G03979.

After filing the FAFSA, students will receive a Student Aid Report (SAR) which must be reviewed for accuracy, and necessary corrections made. If there are questions, contact the Office of Financial Aid. Students may also be required to submit copies of the their federal tax returns and other supporting documents to verify the information on the FAFSA.

## New Applicants

Students interested in applying for scholarships will need to complete the Teachers College application for Scholarship. (Please check the Financial Aid website for instructions and deadlines for completing this application form). Several scholarships do require demonstration of financial need. New students must file the FAFSA (if qualified) to be considered for federal aid.

## Continuing Students

Students interested in applying for scholarships or financial aid will need to complete the Teachers College application for Scholarship and Financial Aid. (Please check the Financial Aid website for instructions and deadlines for completing this application form). Continuing students must file the FAFSA for each year that they wish to be considered for federal aid.

## International Students

International Students wishing to apply for scholarships or financial aid will need to complete the Teachers College application for

Scholarship and Financial Aid. International students should also review the Application Procedure for International Students and the scholarship opportunities for international students.

How Need-based Eligibility is Determined The information provided on the FAFSA is applied to a federally designed formula which calculates the "estimated family contribution," the theoretical amount the student should have available for educational costs. The cost of education minus the family contribution is "need". The total amount of need-based aid cannot exceed this figure.

Normally, the need calculations are based on data from the prior calendar year. However, the Office of Financial Aid may recalculate family contribution if the student's financial circumstances change significantly during the academic year. Students requesting recalculation based on academic year information should provide a written explanation of the circumstances and consult a financial aid counselor to determine the supporting documentation that will be needed.

## How Aid is Awarded

To award need-based funds, the College makes up an academic year student budget that consists of the average costs of tuition, fees, and other expenses. The amount for tuition and fees, books and supplies is adjusted based on full-time, three-quarter time, and half-time enrollment. If enrollment plans change during the academic year, students should notify the Office of Financial Aid in case it becomes necessary to adjust the aid package.

During the 2011-2012 academic year, the estimated fall/spring budget for a full-time student enrolled for 24 points was:

| Tuition and Fees | $\$ 29,544$ |
| :--- | ---: |
| $\quad$ Living Allowance | $\$ 24,100$ |
| $\quad$ Books and Supplies | $\$ 4,200$ |
| College Fee | $\$ 776$ |
| Transportation | $\$ 4,500$ |
| Health Services Fee | $\$ 900$ |
| Miscellaneous | $\$ 6,300$ |
| Total | $\$ 70,320$ |

The family contribution toward academic year living and educational expenses is then deducted from this budget. For example:

| Budget | $\$ 70,320$ |
| :--- | :--- |
| Family Contribution | $-(9,400)$ |
| Need | $\$ 60,920$ |

After need is determined, the Office of Financial Aid tries to meet this amount with financial aid. Often, a variety of sources are combined into a package, which might look like this:

| Department Scholarship (\$1,231 per credit/point) | \$7,386 |
| :---: | :---: |
| Federal Work Study | \$6,000 |
| Federal Perkins Loan | \$4,000 |
| Federal Subsidized |  |
| Stafford Loan | \$8,500 |
| Federal Unsubsidized |  |
| Stafford Loan | \$12,000 |
| Total | \$37,886 |

If students cannot provide the full amount of the family contribution, some banks offer cred-it-worthy loans that can be used to finance the remaining cost of attendance. However, the total of all financial aid, including loans used to replace family contribution, cannot exceed the total cost of attendance.

How Aid is Disbursed
Scholarships are disbursed to a student's account on the first day of in-person registration once the student has registered in a degree program for the semester. Federal loans are disbursed when a student meets the following criteria: (1) has been accepted in a degree program; (2) has registered for at least half time status each semester; (3) has completed an entrance interview; (4) has a master promissory note on file with their lender; and (5) has completed verification of income and residency, if required.

Tuition, fees, account charges, and refunds are processed by the Office of Student Accounts, which is located in 133 Thompson Hall.

## Additional Steps and Conditions

## Prior to Release of Funds

Prior Default: Students in default on a federal loan, or who owe a repayment on a Pell, SEOG, or SSIG grant cannot receive federal need-based aid until the status is cleared.

Verification: Some students are randomly selected by the federal government for a process called verification. If a student is selected, she/he will have to provide a copy of her/his federal income tax return and other documents to the Office of Financial Aid. An award letter will not be generated until all documents are submitted to the Office of Financial Aid. Students interested in workstudy employment cannot begin until awarded.

## Maintaining Federal Student Aid Eligibility

All students requesting and receiving federal student aid must meet and maintain the following criteria:

- must be enrolled as a matriculated student in an eligible program
- must make satisfactory progress
- must meet enrollment status requirements
- must have resolved any drug conviction issue

Failure to meet the above requirements may result in the loss of federal student aid eligibility. Students will need to present proof of resolution to the Office of Financial Aid before aid can be offered or disbursed. Please contact the Office of Financial Aid for more information.

Satisfactory Academic Progress: In order to maintain eligibility for aid, students must make satisfactory progress toward their degree. In addition to meeting all standards of academic performance required in the program, students must maintain a minimum of points per semester in order to remain eligible for student aid. (See chart)

## Return of Title IV Funds

This policy applies to students who complete $60 \%$ or less of the enrollment period (i.e., Fall, Spring or Summer session) for which they received Federal Title IV aid. A student who drops a class but still completes one or more classes does not qualify for the Return of Title IV Funds policy. The term "Title IV aid" refers to the following Federal financial aid programs: Unsubsidized Federal Stafford loans, Subsidized Federal Stafford loans, Federal Perkins loans, Federal Grad PLUS loans, and Federal TEACH Grant.

To conform with the policy, Teachers College must determine the student's withdrawal date. The withdrawal date is defined as: 1.the date the student began the withdrawal process or officially notified Teachers College of their intent to withdraw; or 2. the last date of attendance at an academi-cally-related activity by a student who doesn't notify Teachers College.

The calculation required determines a student's earned and unearned Title IV aid based on the percentage of the enrollment period completed by the student. The percentage of the period that the student remained enrolled is derived by dividing the number of days the student attended by the number of days in the period. Calendar days (including weekends) are used, but breaks of at least 5 days are excluded from both the numerator and denominator.

Until a student has passed the $60 \%$ point of an enrollment period, only a portion of the student's aid has been earned. A student who remains enrolled beyond the $60 \%$ point is considered to have earned all awarded aid for the enrollment period.

Earned aid is not related in any way to institutional charges. In addition, the College's refund policy and Return of Title IV Funds procedures are independent of one another. A student who withdraws from a course may be required to return unearned aid and still owe the college for the course. For more information on the Teachers College withdrawal and institutional charges' policies, please consult the Teachers College catalog.

## SATISFACTORY ACADEMIC PROGRESS

(For Financial Aid)

| After this semester | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Points Master's <br> students must <br> complete: | 6 | 15 | 27 | 39 | 51 | 53 | 63 | 63 | 63 | 63 | No longer <br> eligible |  |
| Points Doctoral <br> students must <br> complete: | 6 | 15 | 27 | 39 | 51 | 63 | 75 | 87 | 90 | 90 | Dissertation <br> Advisement |  |
| With at least <br> this GPA: | 2.5 | 2.5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

The responsibility to repay unearned Title IV aid is shared by the College and the student. For example, the calculation may require Teachers College to return a portion of Federal funds to the Federal Title IV programs. In addition, the student may also be required to return funds based on the calculation. A student returns funds to the Federal Stafford loan programs based on the terms and conditions of the promissory note of the loan. The return of Federal aid is in the following order: Unsubsidized Federal Direct/Stafford loans, Subsidized Federal Direct/Stafford loans, Federal Perkins loans, Federal Grad PLUS loans, and Federal TEACH Grant.

Notification: Federal financial aid is offered to students via the Award Letter issued by the Office of Financial Aid. Teachers College scholarship award letters are also sent from the Office of Financial Aid. The Office of Financial Aid reserves the right to adjust financial aid award packages in the event of:

- additional funds are received on the behalf of the student
- any changes to students enrollment
- per student's request.

For more information students are encouraged to visit our website at www.tc.edu/financial aid, or call (212) 678-3714 to receive more information.


# Policies and Procedures 

## Teachers College is establishing a policy library. The most current version of the College-wide policies are found at www.tc.edu/policylibrary.

## Definition of Point Credit

A point (equivalent to a semester hour) is the unit of College credit. A point of credit is earned by a minimum of three contact hours per week total time in lecture, laboratory, library and outside work. The weekly three contact hours usually consist of (1) attendance for a fall or spring term equal to one contact hour weekly in lectures or recitations or two contact hours of practical work, and (2) two contact hours additional work for each lecture, or one contact hour extra for each two-hour laboratory period. The time spent on additional work are averages; however, some students find it necessary to devote more time to preparation.

There are some variable-point courses in which a student can register and earn extra credit by doing additional work approved by the instructor. This additional work may entail additional reading, preparing a term paper, engaging in some special project, out-of-class group activities, or fieldwork.

## Credit and Noncredit Courses

Teachers College courses are detailed elsewhere in this Catalog. Certain courses in other parts of the University are open to students in Teachers College, upon the approval of their course instructors and advisors.

Always consult the official catalog of the Faculty, College, or Department in which work is desired. Do not depend upon references or quotations in other announcements.

Some credit-bearing courses are offered also on a noncredit basis, as indicated in the course description. Unless stated otherwise, the fee is one-half of the tuition rate for the minimum number of semester hours (points) for which the course is offered. No Teachers College fee is charged; however, any laboratory fees or special fees announced in the courses are additional. To arrange for attendance at such courses, apply directly at the Office of the Registrar of Teachers College. It is not necessary to follow formal admission and registration procedures. No official record of registration for noncredit courses is kept; and no transcripts or statements certifying to attendance or work completed are issued by the Registrar. When registering for a course on a noncredit basis, one may not change one's enrollment to credit or vice versa.

Fees for special events such as workshops, institutes, and conferences vary. See the official announcement for each special event.

Teachers College reserves the right to cancel or modify the courses listed in this catalog and other official publications and to change the instructors as may be deemed necessary.

## Graduate Credit in Advanced Columbia

 University Undergraduate Courses Students in degree programs may petition theRegistrar to have an advanced undergraduate course offered at Columbia University counted as graduate credit toward the degree. To be considered for graduate credit, the courses must be beyond the general introductory level, relevant to the student's specialty, and must not be available on the graduate level within the University. In addition, a student must obtain a written statement from the instructor of the course clarifying the additional work required in order to differentiate between undergraduate and graduate participation in the course. For basic language courses, courses must be beyond the first two years. No more than 6 points in advanced undergraduate courses may be approved for graduate credit. The advisor's written recommendation is also required and final approval is granted by the Registrar. Petition forms may be obtained in the Office of the Registrar.

## Inter-University Doctoral Consortium

Teachers College participates in the InterUniversity Doctoral Consortium which provides for cross-registration among member institutions. Fully admitted doctoral candidates after the first year of study in Teachers College may register for courses at the Graduate School and University Center of the City University of New York, Fordham University, Princeton University, the New School for Social Research, New York University, Rutgers University, and Stony Brook University. Ordinarily, such courses must not be available within Columbia University. Applications are available in the Office of the Vice Provost, in 113 Zankel Building or the Office of the Registrar, 324 Thorndike.

Students cross-registered for courses at another university are subject to the academic regulations of the host university, including the grading system, calendar, and academic honor system. It is the responsibility of the students to familiarize themselves with the pertinent regulations of the host university. Teachers College students pay tuition at the standard Teachers College rate to Teachers College for any such courses they take.

## Visiting Scholars Policy and Program <br> Information

Teachers College welcomes visitors and others who do not hold academic appointments at the College to come to TC to facilitate their research and to participate in its activities. To accommodate the needs of these individuals and recognize their contribution to the intellectual life of the College, TC confers Visiting Scholar status, with limited benefits and privileges, according to the policies and procedures described below.

## Eligibility for TC Visiting Scholar Status

Visiting Scholars generally hold a doctorate or its equivalent, from a country other than the United States or are a recognized expert in the field, and are on leave from a faculty appointment at the institution where they are employed. Visiting Scholar status may be offered to scholars from abroad and from American universities and
colleges outside the New York metropolitan area who are not teaching at the College or participating in a research project sponsored by the College.
Practicing professionals and creative artists or international officials and former officials of government or non-government organizations, such as UN and their affiliates, are also eligible to be a Visiting Scholar. In these cases, the requirement of the doctorate may be waived, if needed.
Others eligible for Visiting Scholar status include Teachers College doctoral alumni; staff and doctoral students from foreign universities and government ministries who are engaged in research of special interest to a Teachers College faculty member; and such other persons as will contribute to the intellectual life of Teachers College and are approved by the Vice Provost.

## Faculty Host Recommendation

Visiting Scholar status is conferred on behalf of the Provost and Dean of the College, by the Vice Provost or the Director of the Office of International Student Services, on the recommendation of a faculty member in whose academic discipline the proposed visiting scholar has an interest. The faculty host should also obtain the approval of the department chair. TC institute directors and senior staff may also recommend an individual for Visiting Scholar status. A curriculum vita and description of research goals must accompany an application for Visiting Scholar status.
The faculty host will facilitate mutually beneficial interactions between the Visiting Scholar and department colleagues and students. Visiting Scholars are encouraged to present a summary report on their experience at Teachers College to the Provost.

## Visiting Scholar Privileges at TC

Visiting Scholar privileges are limited to auditing courses with the permission of the instructor, attending open lectures, a University UNI (for access to electronic resources), e-mail account, and services at Teachers College libraries. Borrowing privileges at other libraries are not included. Information about access to other University libraries may be obtained at the Information Office, 201 Russell.

Individuals may be granted Visiting Scholar status for up to one year. The designation may be renewed for no more than one additional year. "Visiting Scholar" is a courtesy designation and does not signify a formal association with the College. No official records are maintained and no statement of activities is issued.

Visiting Scholars receive a special Teachers College identification card. They are responsible for arranging their own financial support and benefits. They are not eligible for Teachers College housing or Columbia University Health Services/ Medical Insurance. They may not be paid com-
pensation from a Teachers College account, given a fellowship or be reimbursed for expenses without prior approval of the Vice Provost or the Director of the Office of International Student Services. They may receive an honorarium for participating in a conference or giving an occasional lecture if they are citizens or permanent residents or, in the case of non-resident aliens, if they have an appropriate visa and the prior authorization of the Director of the Office of International Student Services.

Visiting Scholars are not permitted to enroll in any classes for credit. Prospective visiting researchers wishing to take classes at TC should request an application for non-degree student status from the Office of Admission. Individuals in $\mathrm{F}-1$ or J-1 student status are not granted Visiting Scholar privileges and are required to be full-time students. Contact the Office of International Student Services for more information.

## J-1 Visa Sponsorship for Foreign Nationals

 Foreign nationals will ordinarily need a J-1 (research scholar category) visa in order to visit Teachers College. Upon submission of all documentation required by the government, the Office of International Student Services will issue a Form DS-2019 needed to support the J-1 visa application. Federal regulations require that the applicant for $J-1$ status have sufficient funds for the period of stay at Teachers College and meet the medical insurance requirements of the U.S. Department of State while in the United States. The Application for Visa Certificate (to obtain Form DS-2019) is available from the Office of International Student Services. This office can provide complete details on complying with these requirements.Please note that, all Visiting Scholars on a J-1VISA (i.e., a J-1 Exchange Visitors) must register with the Office of International Student Services slu@tc.columbia.edu

An individual interested in Visiting Scholar status should contact:
Ms. Samantha Lu
Office of International Student Services
Teachers College, Columbia University
Tel: (212) 678-3939
Fax: (212) 678-3990
Email: tcintl@tc.columbia.edu
www.tc.edu/international/VisitingScholars

## Accreditation

All Teachers College programs are registered with New York State Education Department. Teachers College is accredited by the Middle States Commission on Higher Education. In addition, our teacher preparation and school leadership programs are nationally accredited with the National Council for Accreditation of Teacher Education (NCATE). Some programs also have accreditation with other professional organizations or bodies that grant accreditation for specific subject areas. (Not all graduate and professional programs offered at Teachers College have outside accrediting agencies or bodies related to the specific subject area.) American Psychological Association (Counseling Psychology, Clinical Psychology and School Psychology doctoral programs), American Speech-Hear-
ing-Language Association (Speech and Language Pathology), Association for Sport and Physical Education (NASPE) (Physical Education), Commission on Accreditation for Diabetics Education (Nutrition Education), Council for Exceptional Children (Special Education programs), Educational Leadership Constituent Council (Education Leadership), International Reading Association (Reading Specialist), National Association of School Psychologits (School Psychology), National Council of Teachers of English (Teaching of English), National Council of Teachers of Mathematics (Mathematics Education), TESOL (Teaching of English to Speakers of Other Languages), Council on the Education of the Deaf for programs in Education of the Deaf and Hard of Hearing.

## Auditing

Teachers College degree students currently enrolled for 15 or more points may audit one or two courses in Teachers College without fee. Applications for auditing privileges are obtainable from the Office of the Registrar during the change-of-program period. Courses with limited enrollment, laboratory courses, elementary language courses, seminars, and continuing education workshops will not be open to auditors. Audited courses will not appear on the transcript and may not later be applied for credit.

Certified doctoral candidates may audit Teachers College courses which enhance their professional interests. Such courses will not appear on the transcript or fulfill any academic requirement. An eligible doctoral candidate, may obtain an application to audit from the Office of the Registrar, secure written approval of the course instructor, and return the approval form to the Office of the Registrar during the change-of-program period. An auditing permit will be issued.

## Attendance

Students are expected to attend all classes for which they are registered and are responsible for absences incurred by late enrollment.

## Religious Observance

It is the policy of the University to respect its members' observance of their major religious holidays. Where academic scheduling conflicts prove unavoidable, no student will be penalized for absence due to religious reasons, and alternative means will be sought for satisfying the academic requirements involved. If a suitable arrangement cannot be worked out between the student and the instructor, students and instructors should consult the appropriate department chair or director. If an additional appeal is needed, it may be taken to the Provost.

Some of the major holidays occurring during the current academic year are:
Rosh Hashanah
Id al Fitr
Yom Kippur Passover
First days of Succoth
Concluding days of Succoth Good Friday Hanukkah Id al Adha

The Jewish and Islamic holy days begin at sundoum of the preceding day.

It should be noted that because of the size of the event and the space available, convocations held
at Commencement take place in either Riverside Church or the Cathedral of St. John the Divine. The facilities are used in a non-sectarian manner.

## Access to Services

During the academic year, many of the services provided by the College are only available to students who are registered during the given semester. This includes, but is not limited to, library privileges and email accounts. Degree students who are not taking courses in the fall or spring semester may register for IND 4000, Master's Candidate or IND 6000, Doctoral Candidate in order to maintain registration. The fee for either IND 4000 or IND 6000 is the current college fee. During the summer term, email accounts and library access will be granted for students who were registered during the preceding spring term. Access to other services during the summer may vary. Individuals should check with the department providing the service.

## Official College Communication

Teachers College, recognizing the increasing need for electronic communication with students, has established email as an official means of communication with students. In order to ensure effective communication with students, students are required to activate and use the email address provided by the College. Information on how to do that is located at www.tc.edu/computing/newstudents.

Teachers College expects that every student will receive email at his or her Teachers College email address and will read email on a frequent and consistent basis. A student's failure to receive Teachers College and read College communications in a timely manner does not absolve that student from knowing and complying with the content of such communications. Students may elect to redirect (auto-forward) email sent to their Teachers College email address. Students who (auto-forward) redirect email from their official College email address to another address do so at their own risk. If email is lost as a result of forwarding, it does not absolve the student from the responsibilities associated with communications sent to their official University email address. All use of email will be consistent with other Teachers College and Columbia University policies including the Acceptable Use Policy at www.tc.edu/computing/cu/policy.

Information concerning emergencies or school closing is published in several ways:

- WINS at 1010 on AM radio;
- WCBS at 880 on AM radio;
- the TC Web homepage at www.tc.edu; and
- the main telephone number, (212) 678-3000.

In addition to the communication methods above, emergency notifications are made through public address systems in most campus buildings and through TCAlert. All members of the TC community are strongly encouraged to sign up for TCAlert via the portal at my.tc.edu to receive text or voice messages on their cellphones. Use of this system is
limited to urgent messages. The College does not charge for it, although some wireless phone carriers may charge a fee for receiving SMS text messages.

## Grades

Grades in Teachers College are recorded as evaluative, pass/fail, or attendance. All grading symbols used are listed below, as approved by the Faculty. A student electing to be graded on a basis other than the ones announced by the course instructor must request the option and obtain the instructor's written approval not later than the close of the third class meeting. An application for grading options is obtainable from the Office of the Registrar and needs to be filed in the Registrar's Office no later than the close of the third class meeting. Once the option has been approved and filed with the Registrar, it is not subject to change.

All grades are final once submitted to the Office of the Registrar except for grades of "Incomplete."

Grades are defined as follows:
A+ Rare performance. Reserved for highly exceptional, rare achievement.
A Excellent. Outstanding achievement.
A. Excellent work, but not quite outstanding.
B+ Very good. Solid achievement expected of most graduate students.
B Good. Acceptable achievement.
B- Acceptable achievement, but below what is generally expected of graduate students.
C+ Fair achievement, above minimally acceptable level.
C Fair achievement, but only minimally acceptable.
C- Very low performance. The records of students receiving such grades are subject to review. The result of this review could be denial of permission to register for further study at Teachers College. No more than 3 points of C-may be credited toward any degree or diploma. Students completing requirements for more than one degree or diploma may count 3 points of C- toward only one such award. A student who accumulates 8 points or more in C - or lower grades will not be permitted to continue study at the College and will not be awarded a degree or diploma.
F Failure. The records of students receiving such grades are subject to review. The result of this review could be denial of permission to register for further study at Teachers College. A student who accumulates 8 points or more in C - or lower grades will not be permitted to continue study at the College and will not be awarded a degree or diploma. A course usually may not be repeated unless it is a required course. When the course is required, the student will reregister and obtain a satisfactory grade. The previous grade remains on the transcript.
P Passed. Some courses are graded only on a pass/fail basis for the instances in which
greater evaluation specificity is neither required nor desirable and is used to indicate passing performances when only dichotomous evaluation is used. At no time will the transcript carry any other grade nor will supplementary statements be issued. Application for the Pass/Fail option is to be made during the first three class sessions with the approval of the course instructor. Applications are available in the Office of the Registrar. Once the option is approved, it may not be changed.
DP Doctoral pass credit. The grade of DP may be assigned only to a certified doctoral candidate in a Teachers College course, having successfully completed all requirements prescribed by the instructor. The candidate must request DP credit before two-thirds of the class sessions have met. Eligibility is determined upon presentation of the doctoral identification card, and a record of the request for a DP grade is made by completing a form obtainable from the Office of the Registrar. DP credit is available to doctoral students only in terms subsequent to the terms in which the student is certified. DP credit may not be used toward M.A. or M.S. degree requirements. A maximum of 6 points of DP credit may be used toward Ed.M. degree requirements.
WD Withdrawn. Withdrawal occurring subsequent to the close of the change-ofprogram period during the term. See the section on withdrawal from courses.
YC Year Course. The symbol "YC" is assigned for the first half of a year course (courses with a " $z$ " suffix). At the end of the second half, the grade is entered on the transcript denoting the instructor's evaluation.
R Attendance Credit. Students desiring R credit for any course must request permission, in writing, to the instructor, before two-thirds of the class sessions have met. The instructor may approve or deny the request. If approval is granted, the instructor may stipulate requirements to be met in addition to regular attendance. Forms are available in the Office of the Registrar to be used for obtaining approval. Mathematics majors in the Department of Mathematics, Science and Technology must have their applications cosigned by the program coordinator. Courses taken through the Interuniversity Doctoral Consortium may not be taken for an R grade. The applicability of R credit in meeting degree program requirements is noted as follows: For Master of Arts and Master of Science degrees, no R credit is permissible. For Master of Education degree programs, a maximum of six semester hours of attendance credit is acceptable in meeting the point requirement, but may not be used to satisfy the threecourse out-of-department requirement. For doctoral programs, a maximum of
nine semester hours of attendance credit is permitted toward the minimum point requirement for the degree, provided they are not used to fulfill the minimum distribution requirements.

The above grades are final and may not be changed.

IN Incomplete. The grade of Incomplete is to be assigned only when the course attendance requirement has been met but, for reasons satisfactory to the instructor, the granting of a final grade has been postponed because certain course assignments are outstanding. If the outstanding assignments are completed within one calendar year from the date of the close of term in which the grade of Incomplete was received and a final grade submitted, the final grade will be recorded on the permanent transcript, replacing the grade of Incomplete, with a transcript notation indicating the date that the grade of Incomplete was replaced by a final grade. If the outstanding work is not completed within one calendar year from the date of the close of term in which the grade of Incomplete was received, the grade will remain as a permanent Incomplete on the transcript. In such instances, if the course is a required course or part of an approved program of study, students will be required to re-enroll in the course including repayment of all tuition and fee charges for the new registration and satisfactorily complete all course requirements. If the required course is not offered in subsequent terms, the student should speak with the faculty advisor or Program Coordinator about their options for fulfilling the degree requirement.
Doctoral students with six or more credits with grades of Incomplete included on their program of study will not be allowed to sit for the certification exam.

* Missing grade. Final grade has not been assigned by the course instructor.
Release of transcripts, student information, and student access to official academic records The College regards the student's transcript as a personal and private document; it is released only upon written authorization of the student. Unpaid financial obligations to the College will result in the withholding of student transcript and/or diploma. Teachers College does not duplicate copies of transcripts from other institutions which were submitted in support of the applicant's application for admission to the College.

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student's education records within 45 days of the day the College receives a request for access. Students should submit to the Registrar or head of the
office, a written request that identifies the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. The student must bring valid photo identification to the appointment. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes is inaccurate. Students may ask the College to amend a record that they believe is inaccurate. They should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including student workers); law enforcement unit officials; a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or admission committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education

400 Maryland Avenue, SW
Washington, DC 20202-4605
5. The College may release "directory information" with respect to a student. The College has designated the following categories of information as directory information with respect to each student: name, mailing, campus and permanent addresses, photo, email address, University Network ID (UNI) degree program and major field of study, dates of attendance at the College, full, half or part-time status, degrees conferred and their dates, dissertation title and dissertation committee members, and master's essay title and sponsor. A student in attendance at the College who does not wish the "directory information" released should
notify the Office of the Registrar, in writing of his/her wish to withhold such information in the future.
6. Upon written request by a student, the College may release information in a student's educational records at Teachers College to third parties. The student should make a request for such release in writing with the student's signature for such release to the Office having custody of the record. A student will ordinarily not be provided with copies of any part of his/her record other than the Teachers College transcript unless the inability to obtain copies of any part of his/her record other than the transcript would effectively prevent him/her from exercising his/her right to inspect and review his/her educational records. The College may impose a charge for copying a student's records in connection with such a release. The charge for copies is $.20 \nless$ per page.
7. It shall be a condition of the release by the College of any personal information on a student to a third party that the party to which the information is released will use such information only for the purpose for which the disclosure was made.

## 8. Questions should be referred to the Registrar.

## Psychological Welfare of Our Students

Teachers College recognizes the importance of its students' academic progress and personal wellbeing. The College employs a part-time Clinical Graduate Assistant (GA) who is available to meet with any student in need of short-term counseling. The Clinical GA can be reached at (212) 6783262. Bearing in mind the safety and well-being of all members of its community, the College may discontinue the enrollment of, or take other action with respect to, a student who is experiencing mental health issues that prevent safe and successful participation in his or her academic program, or that threaten the safety or well-being of others. If a student is separated from the College, she/he will be informed of the process for requesting reenrollment through the Office of the Vice Provost.

1. Temporary Suspension Policy/Procedure. If a student commits an act deemed threatening and/or dangerous to self or others, the Vice Provost, Associate Vice Provost, or Assistant Vice President for Campus and Auxiliary Services (or, in their absence, the Director or Student Activities and Programs or Director of Residential Services) can immediately effect a Temporary Suspension from the College and/or residence halls. The Temporary Suspension will be in writing and delivered to the student; it can not be appealed. Such a suspension will be in effect until the student meets with the Vice Provost or designee, who will then decide whether to continue or lift the suspension in consultation with members of the Psychological Emergency Response Team (PERT) and others as appropriate. If a decision is made to lift the suspension, the student will receive written permission to return to class and/or the residence halls. If the student is not permitted to return to the College, the student will be involuntarily withdrawn from courses. If the student is not allowed to return to the residence halls, his/her emergency contact will be notified.
2. Involuntary Withdrawal. The College may discontinue the enrollment of a student whose conduct prevents safe and successful participation in his or her academic program, impedes the work of other students, faculty, or administrative staff, or threatens the safety or well-being of self or others. This decision shall be made by the Vice Provost in consultation with PERT and others as deemed appropriate. The student will not be eligible to re-enroll until the Conditions for Continuance as a Student have been met.

An involuntary withdrawal may be appealed. A student who wishes to appeal this decision must submit the appeal in writing to the President's office within five (5) business days of the decision. The President's office will review the appeal and provide the final decision to the student within seven (7) business days of receipt. There is no further appeal of the President's decision.
3. Conditions for Continuance as a Student. An individual who has committed an act deemed threatening and/or dangerous to self or others will be required to meet certain requirements before being permitted to return to the College, including a recommendation for readmission or continuance by a qualified mental health professional. The student may also be required to enter into a behavioral contract to establish conditions under which that student may continue or resume enrollment at TC. Conditions may include reduced schedule loads or maintenance counseling with a member of the University Counseling Center licensed professional staff. Final readmission authority for a re-entering student rests with the Vice Provost, in consultation with PERT, others as deemed appropriate, and appropriate faculty member(s) who will meet to review the requested documents, establish any conditions and render their opinion to the Vice Provost. The College reserves the right to require administrative evaluations with subsequent recommendations from Columbia University Counseling and Psychological Service (CU/CPS). In the case of an attempted or threatened suicide, PERT will respond in compliance with the Student Suicide Threat Response Policy and in consultation with CU/CPS or others as appropriate.

## POLICY ON ACCEPTABLE USE OF INFORMATION TECHNOLOGY RESOURCES AT TEACHERS COLLEGE

## Objectives

The purpose of this policy is to promote and improve the effectiveness of Teachers College computing and communications resources. As an academic community, the College places a special value on free expression of ideas. However, unlawful or inappropriate use of these information technology (IT) resources can infringe the rights of others. Accordingly, all members of the College community are expected to use these resources responsibly. Prevention of abuse of the College's IT resources is important to:

- promote the appropriate and productive use of the College's information technology resources, which are a finite, shared resource of the College community;
- protect individuals from annoyance and harassment;
- prevent waste of the IT resources and obstruction of College activities;
- and protect the College against seriously damaging or legal consequences.

Policy
The information technology resources of the College are part of the Columbia University network; and therefore, all College users must be familiar with and adhere to the University's policies found at http://www.columbia.edu/acis/policy. Use of College information technology resources must also conform with College policies, regardless of explicit reference in those policies to electronic or other media. Policies including those related to professional conduct, protection from harassment and others are found at the Human Resources website and in this Student Handbook at http://www.tc.edu/administration/student-handbook/. College IT resources shall not be used to violate any City, State or Federal laws or any College or University policies. Copying, storing, displaying, or distributing copyrighted material using College or University computers or networks without the express permission of the copyright owner, except as otherwise allowed under the copyright law, is prohibited. Under the Digital Millennium Copyright Act of 1998, repeat copyright infringements by a user of the College's IT resources can result in termination of the user's access to those resources. It is illegal and a violation of College Polity to attempt to gain access to or use another person's ID, password or account, or to send an email impersonating another individual, regardless of where the email originates. Sharing of passwords is prohibited and each user is responsible for the proper use of his or her account and any activity conducted with it. Communication at the College, regardless of whether spoken, written or electronic, should be conducted courteously, and with respect for other people's ideas, privacy, intellectual property, and right to be free from intimidation, harassment, and unwarranted annoyance, including, but not limited to, chain letters, and obscene and other unwelcome messages. All email and postings should have the name of a person from or for whom it is sent, even if replies are not permitted. Broadcast messages to large lists should have an educational or work-related significance to many members of the group. Messages or files that interfere with or impair the computers or activities of other people are not allowed. This includes viruses, worms and Trojan horses.

Consequences for failure to abide by this policy may range from warnings to suspension of email and other computing privileges to dismissal, termination of employment or criminal proceedings.

## Complaints

Individuals who believe that there has been a violation may contact the Ombudsman, the Vice Provost or the Director of Information Technology.

## Student Conduct

The admission of a student, their continuance upon the rolls of the College, the receipt by them
of academic credit for work completed, graduation, and the conferring of any degree or diploma upon them shall be subject strictly to the control of the College, which shall be free to refuse or cancel registration at any time, on any grounds, except those cited (in the Non-Discrimination Policy), which it deems desirable (Statutes, VII-C).

Teachers College (TC or the College) expects members of the College community to observe traditional norms of scholarly discourse, academic integrity, and fairness. All members of the College community are expected to exhibit the high level of personal integrity which society must demand of professionals.

Teachers College insists on the greatest degree of freedom of inquiry, teaching, learning, and expression for all of its members. Thus activities which disrupt the regular and essential operation of the College or Columbia University are not permitted. Students or other members of the College community may charge students with violating these standards. Students found guilty of violating these standards of conduct may be subject to appropriate disciplinary action, ranging from reprimand to disciplinary probation, suspension or expulsion.

Columbia University has separate Rules of University Conduct which apply to all those who visit its campus or use its facilities. Violations of these Rules can lead to sanctions including the eradication of permission to visit the Columbia campus or use of its facilities and suspension or dismissal from Columbia courses in which a Teachers College student may be enrolled.

The full document that addresses student conduct can be accessed in the "College Policies, Students' Rights \& Responsibilities" section of the Student Handbook or at www.tc.edu/studentactivities.

## Policy on Protection from Harassment

 Teachers College is committed to providing a working and learning environment free from harassment and to fostering a vibrant, nurturing community founded upon the fundamental dignity and worth of all its members. Consistent with this commitment and with applicable federal, state, and local laws, it is the policy of the College 1) not to tolerate harassment in any form, 2) to actively foster prevention of harassment in the TC community and 3) to provide faculty, students, administrators, and staff with mechanisms for seeking informal or formal resolution.Harassment is detrimental to the supportive setting TC strives to provide for its community. Whether or not it is unlawful, harassment that inappropriately impedes the performance or experience of others as employees or students at TC is prohibited.

In accordance with these intentions, the College maintains a policy on Protection from Harassment and procedures for addressing complaints about harassment. All members of the College community are expected to adhere to this policy and to cooperate with the procedure it describes for responding to complaints of harassment. They are also encouraged to report any conduct they believe
to be in violation of this policy. Management and supervisory personnel in particular are responsible for consulting with the appropriate College resources as described in the College Procedures for Handling Harassment in order to take reasonable and necessary action to prevent harassment in the workplace and to respond promptly and effectively to any such claims.

The Office of the Vice President for Diversity and Community Affairs, (212) 678-3391, conducts staff development and training programs on harassment. The Office of Student Activities and Programs, (212) 678-3690, provides student programs and information. The policy is available at www.tc.edu/policylibrary/policy_on_protection_ from_harassment.

## Retaliation

Retaliation against anyone who raises concerns, files a complaint or participates in an investigation is prohibited. Intentionally making a false charge of harassment or providing false information is a serious breach of TC principles. Employees and students will not, however, suffer any adverse actions for honestly reporting instances of alleged harassment or participating in an investigation, even if the allegations of harassment are not ultimately sustained. Students should immediately report acts of retaliation to either the Office of the Vice Provost or to the Vice President for Community and Diversity. Such reports will be investigated promptly. Any person found to have retaliated against another for reporting harassment will be subject to disciplinary action, up to and including termination.

## NON-DISCRIMINATION POLICY

Continuing its long-standing policy to support active equality for all persons, Teachers College does not discriminate on the basis of race, color, religion, creed, sex, sexual orientation, national origin, ancestry, age, marital status, citizenship status, veteran status, disability or any other criterion specified by federal, state or local laws, in the administration of its admissions, employment and educational policies or scholarship, loan, athletic and other school-administered programs. Rather, Teachers College affirms that it admits students and selects employees regardless of their race, color, religion, creed, sex, sexual orientation, national origin, ancestry, age, marital status, citizenship status, veteran status, disability or any other criterion specified by federal, state or local laws and thereafter accords them all the rights and privileges generally made available to students or employees at the school.

Students with concerns about the application of civil rights laws (including Title IX, the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and the Age Discrimination Act) may wish to speak with the Office of the Vice Provost, 113 Zankel, (212) 678-3052, the Vice President for Diversity and Community, Janice Robinson, 128 Zankel, (212) 678-3391, or the Ombudsman, Erwin Flaxman, 280 Grace Dodge, (212) 678-4169. For more information, see: www.tc.edu/diversity/ndp.


PROGRAM TITLE
HEGIS**
AWARD

| AFRICAN EDUCATION | 0305 | Adv. Cert. |
| :---: | :---: | :---: |
| BIOLOGY (7-12)- INITIAL CERTIFICATION | 0401.01 | M.A. |
| BEHAVIORAL NUTRITION | 0424 | Ph.D. |
| COMPUTING IN EDUCATION | 0799 | M.A. |
| COMPUTING IN EDUCATION- DISTANCE LEARNING | 0799 | M.A. |
| BILINGUAL/BICULTURAL CHILDHOOD EDUCATION. DUAL CERTIFICATION | 0802 | M.A. |
| BILINGUAL/BICULTURAL EDUCATION. InITIAL CERTIFICATION | 0802 | M.A. |
| CURRICULUM AND TEACHING: ELEMENTARY EDUCATIONPROFESSIONAL CERTIFICATION | 0802 | M.A. |
| ELEMENTARY INCLUSIVE EDUCATION. InITIAL CERTIFICATION | 0802 | M.A. |
| ELEMENTARY INCLUSIVE EDUCATION- INITIAL CERTIFICATION WITH GIFTED EXTENSION | 0802 | M.A. |
| CURRICULUM AND TEACHING: SECONDARY EDUCATIONPROFESSIONAL CERTIFICATION | 0803 | M.A. |
| HIGHER AND POSTSECONDARY EDUCATION | 0805 | M.A., Ed.M., Ed.D. |
| ADULT EDUCATION GUIDED INTENSIVE STUDY (AEGIS) | 0807 | Ed.D. |
| ADULT LEARNING AND LEADERSHIP | 0807 | M.A., Ed.M., Ed.D. |
| ADMINISTRATION OF SPECIAL EDUCATION PROGRAMS | 0808 | Ed.D. |
| $\dagger *$ APPLIED BEHAVIOR ANALYSIS | 0808 | Ed.D., Ph.D. |
| APPLIED BEHAVIOR ANALYSIS-INITIAL DUAL CERTIFICATION | 0808 | M.A. |
| *BLINDNESS AND VISUAL IMPAIRMENT | 0808 | Ed.D. |
| *CROSS-CATEGORICAL STUDIES | 0808 | Ed.D. |
| *DEAF AND HARD OF HEARING | 0808 | Ed.D. |
| EARLY CHILDHOOD EDUCATION: SPECIAL EDUCATION. INITIAL CERTIFICATION | 0808 | M.A. |
| EARLY CHILDHOOD EDUCATION: SPECIAL EDUCATION. INITIAL DUAL CERTIFICATION | 0808 | M.A. |
| GUIDANCE AND REHABILITATION | 0808 | M.A. |
| ELEMENTARY INCLUSIVE EDUCATIONINITIAL DUAL CERTIFICATION | 0808 | M.A. |
| $\dagger *$ INTELLECTUAL DISABILITY/AUTISM | 0808 | Ed.D., Ph.D. |
| INTELLECTUAL DISABILITY/AUTISMINITIAL DUAL CERTIFICATION | 0808 | M.A. |
| INTELLECTUAL DISABILITY/AUTISM: EARLY CHILDHOOD. DUAL CERTIFICATION | 0808 | Ed.M. |
| INTELLECTUAL DISABILITY/AUTISM: CHILDHOOD/ELEMENTARYDUAL CERTIFICATION | 0808 | Ed.M. |
| INSTRUCTIONAL PRACTICE IN SPECIAL EDUCATION | 0808 | Ed.M. |
| $\dagger *$ PHYSICAL DISABILITIES | 0808 | Ed.D., Ph.D. |
| SECONDARY INCLUSIVE EDUCATION- INITIAL CERTIFICATION | 0808 | M.A. |
| SEVERE AND MULTIPLE DISABILITIES: ANNOTATION | 0808 | M.A. |
| SUPERVISION OF SPECIAL EDUCATION | 0809 | Ed.M. |
| GIFTED EDUCATION | 0811 | M.A. |
| GIFTED EDUCATION- INITIAL CERTIFICATION | 0811 | M.A. |
| DEAF AND HARD OF HEARING | 0812 | M.A. |
| DEAF AND HARD OF HEARING- InITIAL CERTIFICATION | 0812 | Ed.M. |

DEAF AND HEARING IMPAIRED: ADOLESCENCE EDUCATION. DUAL CERTIFICATION
DEAF AND HEARING IMPAIRED: EARLY CHILDHOOD EDUCATION INITIAL DUAL CERTIFICATION
DEAF AND HEARING IMPAIRED: ELEMENTARY EDUCATIONINITIAL DUAL CERTIFICATION
DEAF EDUCATION: READING SPECIALIST- INITIAL DUAL CERTIFICATION BLINDNESS AND VISUAL IMPAIRMENT- INITIAL CERTIFICATION BLINDNESS AND VISUAL IMPAIRMENT: ADOLESCENCE EDUCATIONINITIAL DUAL CERTIFICATION
BLINDNESS AND VISUAL IMPAIRMENT: CHILDHOOD EDUCATIONINITIAL DUAL CERTIFICATION
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SPEECH AND LANGUAGE PATHOLOGY: BILINGUAL OPTIONINITIAL CERTIFICATION SPEECH AND LANGUAGE PATHOLOGYBILINGUAL EXTENSION INSTITUTE
HISTORY AND EDUCATION
PHILOSOPHY AND EDUCATION APPLIED EDUCATIONAL PSYCHOLOGY: COGNITIVE, BEHAVIORAL, AND DEVELOPMENTAL ANALYSIS
COGNITIVE STUDIES IN EDUCATION
PSYCHOLOGY IN EDUCATION
EARLY CHILDHOOD EDUCATION
EARLY CHILDHOOD EDUCATION- INITIAL CERTIFICATION
EARLY CHILDHOOD EDUCATION - SPECIAL EDUCATION
APPLIED STATISTICS
SCHOOL COUNSELOR
APPLIED DEVELOPMENTAL AND LEARNING PSYCHOLOGYSCHOOL PSYCHOLOGY
APPLIED EDUCATIONAL PSYCHOLOGY- SCHOOL PSYCHOLOGY EDUCATIONAL LEADERSHIP
EDUCATIONAL LEADERSHIP STUDIES
LEADERSHIP, POLICY AND POLITICS
$\dagger$ †EDUCATION LEADERSHIP MANAGEMENT(M.B.A. THROUGH COLUMBIA UNIVERSITY GRADUATE SCHOOL OF BUSINESS)
PRIVATE SCHOOL LEADERSHIP
PUBLIC SCHOOL DISTRICT LEADERSHIP
URBAN EDUCATION LEADERS PROGRAM
PUBLIC SCHOOL BUILDING LEADERSHIP
CURRICULUM AND TEACHING
DESIGNING INTERACTIVE MULTIMEDIA INSTRUCTION
LITERACY SPECIALIST- INITIAL CERTIFICATION
READING SPECIALIST- INITIAL CERTIFICATION
ART AND ART EDUCATION
ART AND ART EDUCATION - INITIAL CERTIFICATION

HEGIS**

| 0812 | Ed.M. |
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| 0812 | Ed.M. |
| 0812 | Ed.M. |
| 0812 | Ed.M. |
| 0814 | M.A., Ed.M. |
| 0814 | Ed.M. |
| 0814 | Ed.M. |
| 0814 | Ed.M. |
| 0815 | M.S. |
| 0815 | M.S. |
| 0815 | M.S. |
| 0815 | Adv. Cert. |
| 0821 | M.A., Ed.M., Ed.D., Ph.D. |
| 0821 | M.A., Ed.M., Ed.D., Ph.D. |
| 0822 | Ed.M. |
| 0822 | M.A., Ed.D., Ph.D. |
| 0822 | M.A. |
| 0823 | M.A., Ed.M., Ed.D. |
| 0823 | M.A. |
| 0823 | Ed.M. |
| 0824 | M.S. |
| 0826.01 | Ed.M. |
| 0826.02 | Ed.M. |
| 0826.02 | Ed.D., Ph.D. |
| 0827 | Ph.D. |
| 0827 | M.A., Ed.M., Ed.D. |
| 0827 | M.A., Ed.M., Ed.D. |
| 0827 | Ed.D. |
| 0827 | M.A., Ed.M. |
| 0827 | Ed.D. |
| 0827 | Ed.D. |
| 0828 | M.A., Ed.M. |
| 0829 | M.A., Ed.M., Ed.D. |
| 0829 | Adv. Cert. |
| 0830 | M.A. |
| 0830 | M.A. |
| 0831 | M.A., Ed.M., Ed.D., Ed.D.C.T. |
| 0831 | M.A. |

## MUSIC AND MUSIC EDUCATION

MUSIC AND MUSIC EDUCATION- INITIAL CERTIFICATION MUSIC AND MUSIC EDUCATION - PROFESSIONAL CERTIFICATION MATHEMATICS EDUCATION

## SCIENCE EDUCATION

SCIENCE AND DENTAL EDUCATION
SUPERVISOR/TEACHER OF SCIENCE EDUCATION
TEACHER EDUCATION IN SCIENCE
APPLIED PHYSIOLOGY
KINESIOLOGY
MOTOR LEARNING
MOVEMENT SCIENCES AND EDUCATION
PHYSICAL EDUCATION
PHYSICAL EDUCATION- INITIAL CERTIFICATION PHYSICAL EDUCATION - PROFESSIONAL CERTIFICATION PHYSICAL EDUCATION, CURRICULUM AND TEACHING IN APPLIED PHYSIOLOGY AND NUTRITION

## HEALTH EDUCATION

BILINGUAL/BICULTURAL EDUCATION BILINGUAL/BICULTURAL EDUCATION EXTENSION COMPARATIVE AND INTERNATIONAL EDUCATION COOPERATION AND CONFLICT RESOLUTION INSTRUCTIONAL TECHNOLOGY AND MEDIA INTERNATIONAL EDUCATIONAL DEVELOPMENT NEUROSCIENCE AND EDUCATION TEACHING AND LEARNING WITH TECHNOLOGY TECHNOLOGY SPECIALIST: K-12- INITIAL CERTIFICATION BILINGUAL/BICULTURAL EDUCATION- TRANSITIONAL B BIOLOGY 7-12- TRANSITIONAL B CHEMISTRY 7-12- TRANSITIONAL B EARLY CHILDHOOD EDUCATION: SPECIAL EDUCATION. DUAL CERTIFICATION. TRANSITIONAL B EARTH SCIENCE 7-12- TRANSITIONAL B ENGLISH, TEACHING OF- TRANSITIONAL B INTELLECTUAL DISABILITIES- TRANSITIONAL B MATHEMATICS EDUCATION - TRANSITIONAL B PHYSICS 7-12- TRANSITIONAL B TESOL- TRANSITIONAL B TEACHING AMERICAN SIGN LANGUAGE AS A FOREIGN LANGUAGE- INITIAL CERTIFICATION NURSE EXECUTIVE ROLE (ACCELERATED PROGRAM) NURSE EXECUTIVE ROLE (ACCELERATED PROGRAM) NURSING EDUCATION: PROFESSORIAL ROLE NURSING EDUCATION: PROFESSORIAL ROLE (ACCELERATED PROGRAM) SPEECH AND LANGUAGE PATHOLOGY COMMUNITY NUTRITION EDUCATION NUTRITION AND PUBLIC HEALTH NUTRITION EDUCATION ENGLISH, TEACHING OF ENGLISH EDUCATION

HEGIS**
AWARD
M.A.

0832
M.A., Ed.M., Ed.D., Ed.D.C.T.

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M.A., Ed.M.

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M.A.
M.A., M.S., Ed.M., Ed.D., Ed.D.C.T., Ph.D.

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M.A.
M.A.
M.S., Ed.M.
M.A., Ed.M., Ed.D.

Ph.D.
M.A., Ed.M., Ed.D.

Ed.D.
M.A.
M.A.
M.A.
M.A., Ed.M., Ed.D.
M.S.
M.A., M.S., Ed.D.
M.A.

Adv. Cert.
M.A., Ed.M., Ed.D., Ph.D.

Adv. Cert.
M.A., Ed.M., Ed.D.
M.A., Ed.M., Ed.D.
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Ed.M.
M.S., Ed.D.
M.S., Ed.D.
M.A., Ed.M., Ed.D., Ed.D.C.T.

Ph.D.

| ENGLISH, TEACHING OF- INITIAL CERTIFICATION | 1501.01 | M.A. |
| :---: | :---: | :---: |
| ENGLISH, TEACHING OF- PROFESSIONAL CERTIFICATION | 1501.01 | M.A. |
| APPLIED LINGUISTICS | 1505 | M.A., Ed.M., Ed.D. |
| COMMUNICATION AND EDUCATION | 1506 | M.A., Ed.M., Ed.D. |
| TESOL (TEACHING OF ENGLISH TO SPEAKERS |  |  |
| OF OTHER LANGUAGES) | 1508 | M.A., Ed.M., Ed.D. |
| TESOL- INITIAL CERTIFICATION | 1508 | M.A. |
| TESOL- JAPAN | 1508 | M.A. |
| MATHEMATICS EDUCATION- INITIAL CERTIFICATION | 1701 | M.A. |
| MATHEMATICS EDUCATION- PROFESSIONAL CERTIFICATION | 1701.01 | M.A., M.S., Ed.M. |
| ARTS ADMINISTRATION | 1899 | M.A. |
| PHYSICS 7-12- INITIAL CERTIFICATION | 1902.01 | M.A. |
| EARTH SCIENCE 7-12-INITIAL CERTIFICATION | 1917.01 | M.A. |
| CHEMISTRY 7-12-INITIAL CERTIFICATION | 1925.01 | M.A. |
| CLINICAL PSYCHOLOGY | 2003 | Ph.D. |
| COUNSELING PSYCHOLOGY | 2004 | Ph.D. |
| MENTAL HEALTH COUNSELING | 2004 | Ed.M. |
| PSYCHOLOGICAL COUNSELING | 2004 | Ed.M. |
| SOCIAL-ORGANIZATIONAL PSYCHOLOGY | 2005 | Ph.D. |
| MEASUREMENT AND EVALUATION | 2007 | Ed.M., Ed.D., Ph.D. |
| PSYCHOLOGY-ORGANIZATIONAL | 2008 | M.A. |
| DEVELOPMENTAL PSYCHOLOGY | 2009 | Ph.D. |
| PSYCHOLOGY-DEVELOPMENTAL | 2009 | M.A. |
| SOCIAL STUDIES, TEACHING OF | 2201 | M.A., Ed.M., Ed.D, Ph.D. |
| SOCIAL STUDIES, TEACHING OF- InITIAL CERTIFICATION | 2201.01 | M.A. |
| SOCIAL STUDIES, TEACHING OF- PROFESSIONAL CERTIFICATION | 2201.01 | M.A. |
| ANTHROPOLOGY AND EDUCATION | 2202 | M.A., Ed.M., Ed.D., Ph.D. |
| APPLIED ANTHROPOLOGY (WITH COLUMBIA UNIVERSITY |  |  |
| GRADUATE SCHOOL OF ARTS AND SCIENCES) | 2202 | Ph.D. |
| ECONOMICS AND EDUCATION | 2204 | M.A., Ed.M., Ph.D. |
| POLITICS AND EDUCATION | 2207 | M.A., Ed.M., Ed.D., Ph.D. |
| SOCIOLOGY AND EDUCATION | 2208 | M.A., Ed.M., Ed.D., Ph.D. |
| INTERDISCIPLINARY STUDIES IN EDUCATION | 4999 | M.A., Ed.M., Ed.D. |

[^2]** HEGIS: HIGHER EDUCATION GENERAL INFORMATION SURVEY, NEW YORK STATE EDUCATION DEPARTMENT, OFFICE OF HIGHER EDUCATION AND THE PROFESSIONS, CULTURAL EDUCATION CENTER, ROOM 5B28, ALBANY, NY 12230; TELEPHONE (518) 475-5851.

## Columbia University: The Morningside Campus \& Environs



## The Morningside Heights Area of New York City



## Contact Information \& Travel Directions

## Post Office Address:

Teachers College
Columbia University
525 West 120th Street
New York, NY 10027
Telephone: (212) 678-3000
Fax: (212) 678-4048
www.tc.columbia.edu

## Access Services

Office of Access and Services for Individuals with Disabilities Tel/Voice: (212) 678-3689
TTY: (212) 678-3853
Video Phone: (866) 624-3281
Fax: (212) 678-3793
Email: oasid@tc.edu www.tc.edu/oasid

## Admission

Office of Admission
Tel: (212) 678-3710
Fax: (212) 678-4171
Email: tcinfo@tc.edu
www.tc.edu/admissions

## Career Services

Career Services Center
Tel: (212) 678-3140
Fax: (212) 678-3107
Email: careerservices@tc.edu www.tc.edu/careerservices

## Doctoral Studies

Office of Doctoral Studies
Tel: (212) 678-4058
Fax: (212) 678-3005
Email: ods@tc.edu
www.tc.edu/administration/ doctoral

## Employment

Office of Human Resources
Tel: (212) 678-3175
Fax: (212) 678-3178
Email: hr@tc.edu
www.tc.edu/hr

## Housing (On-campus)

Office of Residential Services
Tel: (212) 678-3235
Fax: (212) 678-3222
Email: housing@tc.edu
www.tc.edu/housing

## International Services

Office of International Services
Tel: (212) 678-3939
Fax: (212) 678-3990
Email: tcintl@columbia.edu www.tc.edu/international

## Payment of Fees

Office of Student Accounts
Tel: (212) 678-3056
Fax: (212) 678-4139
Email: StudentAccounts@tc.edu www.tc.edu/studentaccounts

## Registration

Office of the Registrar
Tel: (212) 678-4050
Fax: (212) 678-3005
Email: registrar@tc.edu
www.tc.edu/registrar

## Safety and Security

Office of Campus Safety \& Security
Tel: (212) 678-3098
Fax: (212) 678-3222
Email: tcsecurity@tc.edu www.tc.edu/security

## Financial Aid

Office of Financial Aid
Tel: (212) 678-3714
Fax: (212) 678-4089
Email: FinancialAid@tc.edu www.tc.edu/FinancialAid

## How to Get to

Teachers College
By Bus: Four bus routes include stops at West 120th
Street: M4, M5, M11, M104
By Subway: Take the 1 local subway to the 116th Street Station; walk north on Broadway to West 120th Street. Teachers
College is on the north side of West 120th Street, between Broadway and Amsterdam Avenue.

By Car: The Henry Hudson Parkway (West Side Highway) is convenient to Teachers College. The highway can be reached from most of the main routes entering New York City. Whether driving north or south, leave the West Side Highway at the 96th Street exit; at the first traffic light turn left (north) onto Riverside Drive; at 120th Street turn right and go two blocks east to the College.

Parking: The following garages in the area will accept outside cars if you phone in advance.

E \& B Operating Corp.
137 West 108th Street
(212) 865-8315

Riverside Church Garage
Riverside Drive \& 120th St. (212) 870-6736

Upper Westside Garage
234 West 108th Street
(212) 222-8800

Park Yorkshire Garage
151 West 108th Street
(212) 865-2314

Morningside Garage
3100 Broadway
(212) 864-9877


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[^2]:    * ED.D. IN SPECIAL EDUCATION IS ACQUIRED THROUGH THESE PROGRAMS.
    $\dagger$ PH.D. IN SPECIAL EDUCATION IS ACQUIRED THROUGH THESE PROGRAMS.
    $\dagger \dagger$ JOINT M.B.A. OFFERED BY COLUMBIA SCHOOL OF BUSINESS.

