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## A Message from the President



As both an alumna of Teachers College and its new president, I welcome you to the nation's oldest and largest graduate school of education - 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 practitioners, 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

## Academic Calendar 2006-2007

## AUTUMN TERM 2006 <br> AUGUST 7 <br> 2006

31
$\underset{2006}{\text { SEPTEMBER } 1}$

1-5 Friday-Tuesday. New Student Experience Program (Orientation).
4 Monday. Labor Day. University Holiday.
5 Tuesday. In-person registration for Autumn Term. Hours: 10:00 a.m. to 7:00 p.m.
6 Wednesday. Classes begin. Autumn Term 2006.
6-8 Wednesday-Friday. Registration and add/drop period. Hours: 9:30 a.m. to 6:00 p.m. Wednesday and Thursday; 9:30 a.m. to 5:00 p.m. Friday. Advisors available from 3:00 to 5:00 p.m.
$7 \quad$ Thursday. Last day to file application for Doctoral Certification Examination (Ed.D./Ph.D.) to be given October 20 or October 27.

14 Thursday. Last day to file notification in Office of Doctoral Studies of intention to defend Ed.D. and Ph.D. dissertations during the Autumn Term 2006.

19 Tuesday. Last day to add and drop courses for the Autumn 2006 Term, file a Certificate of Equivalency, and enroll in Student Health Service and Student Medical Insurance programs.

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

25 Monday. Last day to deposit Ed.D. dissertation and abstracts, which have been corrected in accordance with Dissertation Secretary's evaluation, and pay microfilm fee for October 18 award of degree.
OCTOBER
2006

13 Friday. Last day to deposit Ph.D. dissertation with the Office of Doctoral Studies and the Graduate School of Arts and Sciences for the October 18 award of the degree.

18 Wednesday. Award of October degrees and certificates. No ceremony.
20 Friday. Doctoral Certification Examination (Ed.D.PPh.D.) for students not majoring in an area of psychology, 9:00 a.m. to 12 noon and 1:45 to 4:45 p.m.

26 Thursday. Midterm date, Autumn Term 2006.
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 to 4:45 p.m.

NOVEMBER
Wednesday. 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 $\$ 15$ late fee.)

1 Wednesday. Last day to submit, to the Registrar's Office, formal Master's essays for the February 14 award of degree.

22 Wednesday. No Classes. Offices open.
23-26 Thursday-Sunday. Thanksgiving Holidays.
DECEMBER 4
2006

Monday. Registration for the Spring Term for continuing students via web and touch-tone registration begins.

Friday. Autumn Term 2006 ends.
23 Saturday. Termination of occupancy in Teachers College residence halls for Autumn Term students not returning for Spring Term 2007.

## Academic Calendar 2006-2007

## SPRING TERM 2007

| JANUARY | 14 |
| :--- | :--- |
| 2007 | 15 |

$\underset{2007}{\text { FEBRUARY }} 1$
$\underset{2007}{\operatorname{MARCH}} \quad 1$
8

8

| APRIL | 16 |
| :--- | :--- |


| MAY | 8 |
| :--- | :--- |
| 2007 | 9 |

9 Wednesday. Termination of occupancy in Teachers College residence halls for Spring Term 2007 for students not remaining for Summer Session A. Extensions granted for students remaining for Commencement.

11 Friday. Last day to deposit Ph.D. dissertation with the Office of Doctoral Studies and the Graduate School of Arts and Sciences for the May 16 award of degree.

15 Tuesday. Teachers College Master's Degrees Convocations.
(JANUARY 17 - 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 (Orientation).
Tuesday. In-person Registration for Spring Term 2007. Hours: 10:00 a.m. to 7:00 p.m. New Student Experience (Orientation).
Wednesday. Classes begin. Spring Term 2007.
Wednesday-Friday. Late registration and change period. Hours: Wednesday-Thursday 9:30 a.m. to 6:00 p.m.; Friday 9:30 a.m. to 5:00 p.m. Advisors available from 3:00 to 5:00 p.m.

Thursday. Last day to file application for Doctoral Certification Examination (Ed.D./Ph.D.) to be given February 16 or February 23.

Thursday. Last day to file notification in Office of Doctoral Studies of intention to defend Ph.D. and Ed.D. dissertation during Spring Term 2007.

Friday. Last day to deposit Ed.D. dissertation and abstracts, which have been corrected in accordance with Dissertation Secretary's evaluation, and to pay microfilm fee for February 14 award of degree.

Tuesday. Last day to add and drop courses for Spring Term 2007, file a Certificate of Equivalency, and enroll in Student Health Service and Student Medical Insurance plans.

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

Thursday. 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 $\$ 15$ late fee.)

Friday. Last day to deposit Ph.D. dissertation with the Office of Doctoral Studies and the Graduate School of Arts and Sciences for the February 14 award of degree.

Tuesday. Last day to change points in variable-point courses.
Wednesday. Award of February degrees and certificates. No ceremony.
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 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 to 4:45 p.m.

Thursday. Last day to submit, to the Registrar's Office, formal Master's essay for May 16 award of degree.

Thursday. Midterm date, Spring Term 2007.
Sunday-Sunday. Spring Holidays.
Monday. Registration for the Summer Term for continuing students via web and touch-tone registration begins.

Monday. Last day to hold the dissertation defense (Ed.D./Ph.D.) for May 16 award of degree.
Friday. Last day to deposit Ed.D. dissertation and abstracts, which have been corrected in accordance with Dissertation Secretary's evaluation, and pay microfilm fee for May 16 award of degree.

Tuesday. End of Spring Term 2007.

Wednesday. Conferring of degrees, 10:30 a.m.; Teachers College Doctoral Degrees Convocation, 2:30 p.m.


Teachers College instills in its students the capability to solve problems, motivate learners, inspire hope, raise standards and take charge of change. It is an approach that leads our students to value independent thinking and lifelong learning.

This vision, renewed and invigorated to meet changing times, has kept Teachers College in the vanguard of important advances in education during critical periods of the last century. As we confront new challenges, both formidable and unrelenting, we are once again poised to prepare our students for leadership at a time when the need for reform is critical.

Teachers College sees its leadership role in two complementary arenas: One is as a major player in policymaking to ensure that schools are reformed and restructured to welcome all students regardless of their socio-economic circumstances. The other is in preparing educators who not only serve students directly but coordinate the educational, psychological, behavioral, technological, and health initiatives to remove barriers to learning at all ages.

For more than 100 years Teachers College has continued to:

- Engage in research on the central issues facing education
- Prepare the next generation of education leaders
- Educate the current generation of leaders in practice and policy to meet the challenges they face
- Shape the public debate and public policy in education
- Improve practice in educational institutions


## 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 learn most effectively. As a result, the College's earliest programs included such subjects as educational psychology and educational sociology.

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-Locally and Globally Historically, Teachers College has played a vibrant role in shaping and defining education in the New York area. Through the years, our influence has spread across the nation and around the world.

The Heritage School is a unique partnership between Teachers College and the New York City Department of Education. Its extended-day curriculum emphasizes the arts and offers such varied disciplines as karate, mural painting and Japanese. Now in its fifth year, the Heritage School requires 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.

From 1954 through 1978, Teachers College played a vital role in Afghanistan, helping train its teachers and assisting in development of
a functional curriculum. In 2003, after the fall of the Taliban regime, members of our faculty visited Afghanistan to lay the groundwork for the establishment of a National Academy of Education to train teachers. In November of that year, President Arthur Levine signed an agreement with the Afghan Minister of Education that will result in the development of a system of teacher training, new textbooks and a new curriculum framework.

## 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 13 percent international enrollment representing 80 countries. Of the approximately 5,000 students enrolled in Teachers College, about 77 percent are women, 12 percent are African American, 11 percent are Asian American, and 7 percent are of Latin origin. Furthermore, with a median age of 31 years, our students bring maturity, a wealth of knowledge and strength of purpose to their pursuit of degrees and careers in education.

## Main Hall Renamed as the Arthur Zankel Building

Arthur Zankel was a dedicated Trustee, a valued advisor, and a generous contributor of his time, wisdom, and resources to the mission of Teachers College. Most of all, he was our friend. To honor Mr. Zankel and his contributions to education, Teachers College renamed Main Hall as the Arthur Zankel Building.

## 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 J.M. Huber Institute for Learning in Organizations is a researchbased institute dedicated to advancing the state of knowledge and practice for learning and change in organizations. Organizations are provided with tools that help them learn. Research is shared and best practices are learned through various events and publications.

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.

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

## New York-TC's Proving Ground

Teachers College has built a dynamic alliance with New York City. In addition to our work with East Harlem's Heritage School, teacher education students complete practicums in the New York City public schools. 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.


# Arts and Humanities 

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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)
Leslie M. Beebe
(Applied Linguistics/TESOL)
Judith M. Burton (Art)
Steven Dubin
(Arts Administration)
Maxine Greene
(Philosophy and Aesthetics) - Emerita
David T. Hansen (Philosophy)
Janet L. Miller (English)
Ruth Vinz (English)

## ADJUNCT PROFESSORS:

Dino Anagnost (Voice, Conducting)
Mary C. Boys
(Union Theological Seminary)
Gay Brookes (TESOL)
Joan Jeffri (Arts Administration)
Ronald Knapp (Social Studies)
Bert Konowitz (Jazz)
Nel Noddings (Philosophy)

## ASSOCIATE PROFESSORS:

John Baldacchino (Art)
John M. Broughton (Cultural Studies)
Margaret Smith Crocco
(Social Studies)
Lori Custodero (Music)
ZhaoHong Han (TESOL)
Barbara Ann Hawkins (TESOL)
Megan Laverty (Philosophy)
Lenore M. Pogonowski (Music)
James E. Purpura
(Applied Linguistics/TESOL)
Graeme Sullivan (Art)
Cally L. Waite (History)

## ADJUNCT ASSOCIATE PROFESSORS:

Evelyn Chen (Piano)
Eduardo Manual Duarte (Philosophy)
Alvin Fossner (Oboe, Saxophone)
Franklin E. Horowitz
(Applied Linguistics)
Robert Horowitz (Music)
Harriet Luria (Applied Linguistics)
Solomon Mikowsky (Piano)
Joy Moser (Painting)
Patricia Palmieri (History)
Gerardo Piña Rosales (Spanish)
Terry Royce (TESOL, Tokyo)

## ASSISTANT PROFESSORS:

Randall Allsup (Music)
Olga Hubard (Art)
Valerie Kinloch (English)
Anand R. Marri (Social Studies)
Reneé Cherow-O'Leary (English)
Ana Serrano (Social Studies)
Mikki Shaw (English)

## ADJUNCT ASSISTANT PROFESSORS:

Philip Aarons (Arts Administration)
Herman Jie Sam Foek (Art)
Benjamin Fryman (Cultural Studies)
James Frankel (Music)
Andrew Henderson (Organ)
David Iasevoli (English)
Richard Jacobowski (Guitar)
Megan Jessiman (Philosophy)
I. Fred Koenigsberg (Arts Administration)

Ada Kopetz-Korf (Piano)
John D. Kuentzel (Religion)
Leonard Leibowitz (Arts Administration)
Roberta Martin (Social Studies)
Lori McCann (Voice)
Bede McCormack (TESOL)
Angelo Miranda (Percussion)
Jean-Marc Oppenheim (Social Studies)
Patricia Rohrer (Philosophy)
Patricia St. John (Music)
Barbara Tischler (Social Studies)
Jerry Weiner (Social Studies)

## LECTURERS:

Jeanne Goffi-Fynn
(Music and Music Education)
Joanna Labov (TESOL)
Howard A. Williams (Applied Linguistics)
Hansun Zhang Waring (TESOL)
Patricia Zumhagen (English)

## INSTRUCTORS:

Sheyda Ardalan (Art)
John Balbi (TESOL)
Laurence Ballereau (Woodwinds)
Mary Barto (Flute)
Wendy Bowcher (TESOL, Tokyo)
John Brown (English)
Elizabeth Burke (Arts Administration)
Ingrid Butterer (Art)
Christine Casanave (TESOL, Tokyo)
Alexander K. Cates (TESOL, Tokyo)
Carolyn Clark (Arts Administration)
Joyce Culver (Photography)
Martha Clark Cummings (TESOL, Tokyo)
Charles Combs (TESOL)
Jennifer Cutsforth (Social Studies)
Renee Darvin
(Art Education, Museum Studies)
Judith Davidoff
(Renaissance/Baroque Instruments)
Monika Ekiert (TESOL)
Bayard Faithfull (Social Studies)

Chris Gallagher (TESOL, Tokyo)
Shakti Gattegno (TESOL)
Jeanne Golan (Piano)
Erick Gordon (English)
Kirby Grabowski (Applied Linguistics)
Carolyn Graham (TESOL)
Nanci Graves (TESOL, Tokyo)
Mark Helgeson (TESOL, Tokyo)
Jerry James (Painting)
Rebekah Johnson (TESOL)
Gabrielle Kahn (TESOL)
Hyun Joo Kim (Applied Linguistics)
Tatsuya Komatsu (TESOL, Tokyo)
Naomi Lifschitz (Art)
Jane Lindamood (Music)
Thomas Lollar (Ceramics)
Michael Marino (Social Studies)
Jane McIntosh (Arts Administration)
Alexander Meshibovsky (Violin)
Eun-Sung Park (TESOL)
Taejoon Park (Applied Linguisitics)
Mauritzio Pellegrin (Art)
Michael Pellettieri (Printmaking)
Colleen Pettus (English)
Greg Pitts (Ceramics)
Raymond S. Pultinas (English)
John D. Purdy (Applied Linguistics)
Ted Quock (TESOL, Tokyo)
Jane Remer (Art)
Sophia Sarigianides (English)
Fredrica Schoenfeld (English)
Deborah Schwartz (Museum Studies)
Yasushi Sekiya (TESOL, Tokyo)
David Shea (TESOL, Tokyo)
Susan Stempleski (TESOL)
Ruthie Stern (English)
Jason Swift (Sculpture)
Peter Swords (Arts Administration)
Richard Pearson Thomas
(Music Composition)
Melissa Troise (English)
Tak Uemura (TESOL, Tokyo)
Leo Ursini (Saxophone, Jazz)
Gerard Vezzuso (Photography)
Martin Vinik (Arts Administration)
June Wai (TESOL)
Candy Wilmot (English)
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: $\$ 75$.

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.

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 <br> LINGUISTICS

Program Coordinator:
Professor Leslie M. Beebe
Program Office:
(212) 678-3795

Email:
lmb33@columbia.edu
Web site: www.tc.edu/a\&h/AppliedLinguistics

## Applied Linguistics

(Code: TLA)

## Degrees offered:

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

## Program Description:

The program in Applied Linguistics will provide 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
- Cross-cultural pragmatics
- Discourse analysis
- First language acquisition
- Foreign language pedagogy
- Interlanguage analysis
- Phonetics/phonology
- Research
- Second language acquisition
- Second language literacy
- Semantics
- Sociolinguistics
- Syntax
- Technology in applied linguistics
- Testing and assessment


## Special Application

## 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 20 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 (CPE). or

- 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 course work.

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

Ed.M. applicants may 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 transfer a maximum of 15 points in related areas from an outside institution. Ed.D. students may transfer up to 45 points from previous graduate study at an accredited institution. All transfer of points 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 expected 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 and education (3)
- A\&HL 4085 Pedagogical English
- A\&HL $4087 \begin{array}{ll}\text { grammar (3) } \\ \text { Introduction second }\end{array}$
- 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 Discourse analysis: Text and textuality (3)
- One other elective in linguistic analysis (3)
- Teaching practicum along with an elective (3)

Required out-of-program 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.

In addition, 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.

## 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.

## Required Courses in Applied Linguistics (or TESOL) ( 9 points):

- A\&HL 5085 Advanced syntax (3)
- A\&HL 5575 Research literacy in applied linguistics and TESOL (3)
- A\&HL 6587 Seminar in second language acquisition: Acquisitional and cross-cultural pragmatics (3)

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

- A\&HL 4003 Schools of linguistics
- A\&HL 4005 Semantic systems and the lexicon
- A\&HL 4014 Gender, language \& education
- A\&HL 4106 Text and textuality
- A\&HL 5008 Interlanguage analysis
- A\&HL 5515 Advanced topics in applied linguistics I
- A\&HL 5516 Advanced topics in applied linguistics II
- A\&HL 5581 Psycholinguistics and SLA
- A\&HL 5582 Sociolinguistics and SLA
- A\&HL 5588 Trends in SLA research
- A\&HT 4080 Teaching in linguistically diverse classrooms

Required courses out of program
(3 Teachers College courses of at least 2
points each, 6 points minimum): Choose
one from the following courses in statistics, measurement, or research design:

- C\&T5502 Qualitative research classrooms and teaching (2-3)
- HUDM 4050 Introduction to measurement
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5123
- ITSF 4092

Qualitative research and evaluation in international education (3)

- ITSF 5000
- ORLJ 4009 Methods of inquiry: Ethnography and participation (or ITSF 5001 or 5002) (3)
Understanding behavioral
- C\&T 5502
- ITSF 4092 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, 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:

- HUD 4120 Methods of empirical research (3)
- HUDM 4050 Introduction to measurement
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5123 Linear models and experimental design (3)

| - A\&HL 7507 | Dissertation seminar: <br> Applied linguistics and |
| :--- | :--- |
|  | TESOL (1-3) |
| - A\&HL 8901 | Dissertation advisement in <br> applied linguistics (0) |
| - A\&HT 5505 | Research paper: TESOL (1-3) |
| - A\&HT 6505 | Doctoral seminar: TESOL <br> (1-3) |
| - A\&HT 7505 | Dissertation seminar: TESOL <br> $(1-3)$ |

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

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

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

## General Courses

*A\&HL 4000. Introduction to linguistics (3) Faculty/staff. Survey of cognitive and social approaches to the study of language, language acquisition, language systems, 20th century movements in linguistics, language varieties and attitudes, forms and functions of language in the classroom. For non-majors only. Special fee: $\$ 10$.

A\&HL 4001. Sociolinguistics and education (3)
Professor Beebe and Dr. Waring. Language variation based on social class, race, ethnicity, age, and gender; cross-cultural 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. Pre-requisite: 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)Professor Beebe and Dr. Luria. 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/staff. 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)
Faculty/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) Professor Purpura and staff. Prerequisite: A\&HL 4085 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; use of SPSS. Special fee: \$20.

A\&HL 4101. Phonetics and phonology (3) Dr. Williams and Dr. Waring. 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) Professor Beebe. 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. Discourse analysis:
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\&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: $\$ 20$.

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. Research perspectives on language testing (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 sociolinguistics, second language acquisition, assessment, and discourse analysis. Materials fee: $\$ 20$.

A\&HL 5516. Advanced topics in applied linguistics II (3)
Faculty. Permission of instructor required. Research in various methods of discourse analysis of talk or text in selected formal and informal contexts. Materials fee: $\$ 20$.

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 5585. Discourse analysis and SLA
- A\&HL 5588. Trends in SLA research

A\&HL 6587. Seminar in second language acquisition: Acquisitional and cross-cultural pragmatics (3)
Professor Beebe. Permission of instructor required. Pre-requisite: A\&HL 4104 or permission of instructor. Research on acquisitional cross-cultural, interlanguage, pragmatics, Offered in fall and spring only. Special fee: $\$ 20$.

## Doctoral Preparation

A\&HL 5501. Research paper in applied linguistics (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 6507. Doctoral seminar in applied linguistics and TESOL (1-3)

A\&HL 7501. Dissertation seminar in applied linguistics (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. 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 Beebe. Permission of instructor. 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. 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 Beebe. Permission of instructor. 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. 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 Beebe. Permission of instructor. 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 <br> EDUCATION

Program Coordinator:
Professor Judith M. Burton
Program Office: (212) 678-3360
Email: burton@exchange.tc.columbia.edu Web site: www.tc.edu/a\&h/ArtEd

Art and Art Education
(Code: TGA)

## Degrees Offered:

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Education in College
Teaching of Art (Ed.D.C.T.)

## Program Description:

In the Art and Art Education Program, the study of art encompasses the traditions of fine art and the popular arts of mass culture. A central tenet of the program is the role of the arts in nurturing human growth and development throughout the life span. 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, arts centers, hospitals and other 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 also are national leaders in arts education research.

Each of the program's five 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 below). Please see the Teacher Education section of this bulletin for updated information on programs that lead to administrative certification.

The vast cultural resources of New York City, along with a host of other programs, offer students myriad opportunities to enrich their conceptions of art and its diverse practices. There are weekend institutes, colloquia, minicourses, opportunities for involvement in pro-
fessional 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-studying artistic development, or assessing the relationships between schools and cultural organizations.

## 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 program. Please call (212) 678-3360 to request the Application Supplement. 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 600 (250 computer-based) TOEFL score or a score of 10 on the Columbia University English Language proficiency test as well as scores for the Test of Written English (TWE). An in-person writing sample may also be requested.

The 34 -point M.A. degree is specially designed for individuals seeking in-service opportunities, or who wish to complete a special curriculum project, or who need the master's degree to complete state certification. The degree is flexibly structured to accommodate various academic and professional needs. This degree is offered during the regular college year and also as a summer program to be completed over 3 summer sessions. A three year summer 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: Contact Ms. Cathleen Kiebert-Gruen, Program Office (gruen@columbia.edu).

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

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 three years of experience as an educator or practicing professional in the arts; 30 points of prior graduate study may be transferred providing they meet the requirements for the degree. Applicants for the museum studies option must have professional experience 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 accept ance 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 (16 points):

- A\&H 5001 Research methods in arts education
- A\&HA 4080 Artistic development: Children
- A\&HA 4081 Curriculum design in art education
- A\&HA 4281 Field observations
- A\&HA 4085 (two terms) (1 point each)

Historical foundations in art education

- A\&HA 4088 Artistic development: Adolescence to adulthood
- Studio course required
- A\&HA 5922 Master's seminar


## 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 (12 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. All students are urged to attend the program and department-wide workshops offered throughout the academic year; topics vary.

A three year summer 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: Contact Ms. Cathleen KiebertGruen, Program Office(gruen@columbia.edu).

The Master of Arts with
Teacher Certification (40 points)
Required courses in Art Education
(21-23 points minimum):

- A\&HA 4079 Exploring cultural diversity: Implications for arts education
- A\&HA 4080 Artistic development: Children
- A\&HA 4081 Curriculum design in art education
- A\&HA 4085 Historical foundations in art education
- A\&HA 4087 Processes and structures in the visual arts
- A\&HA 4088 Artistic development: Adolescence to adulthood
- A\&HA 4090/5090 Museum issues I or II
- A\&HA 4281 Field observation in art education (two terms)
- A\&HA 4702 Supervised student teaching and seminar: Secondary
- A\&HA 4722 Supervised student teaching and seminar: Elementary
- Studio Courses (two terms)
- Plus: one weekend workshop, topics vary each year


## 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 (6-8 points): Chosen with advisor approval.

In addition, students in this program are required to complete an integrated written 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. Students are expected to attend the department-wide series of workshops offered throughout the academic year; topics vary.

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 (27 points minimum):

- A\&H 5001 Research methods in art education
- A\&HA 4079 Exploring cultural diversity: Implications for art education
- A\&HA 4080 Artistic development: Children, and/or
- A\&HA 4081 Curriculum design in art education
- A\&HA 4087 Processes and structures in the visual arts
- A\&HA 4088 Artistic development: Adolescence to adulthood
- A\&HA 5086 Art in visual culture
- A\&HA 5922 Master's seminar
- Studio course (two terms)


## Required courses outside the program

(6-9 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, and other programs of the College (variable points): Chosen with advisor approval.

In addition, the Ed.M. degree offers two additional options:

- Ed.M students may choose to take a museum concentration as part of their degree. This concentration expolores the art museum as an educational institution, introduces students to object-based teaching 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: Museum education issues I; Museum education issues II.

Doctor of Education (90 points) Required courses within the specialization (16 points):

- A\&H 5001 Research methods in arts education
- A\&HA 4080 Artistic development: Children
- A\&HA 4085 Historical foundations in art education
- A\&HA 5082 Philosophies of art in education
- A\&HA 5086 Art in visual culture
- A\&HA 6502 Doctoral seminar
- A\&HA 7502 Dissertation seminar (two terms)
- A\&HA 8900 Dissertation advisement

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.

In addition, students must complete between 50-60 points in the program, including those transferred, before entering the first of the dissertation seminars. The first seminar prepares students to write the certification papers. To complete certification, students are also expected to offer a professional presentation. These may include a conference presentation; a published article; a peer-group presentation such as a formal seminar presentation or gallery talk; a Macy Gallery exhibition; or some other equivalent professional performance. The doctoral certification process is accomplished through 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 (16 points):- A\&HA 4088 Artistic development:
- A\&HA $5081 \quad$ Curriculum design in art
education: Advanced
- A\&HA 5082 Philosophies of art
- A\&HA 5086 Art in visual culture
- A\&HA 6002 Teaching and administration of art in college

| - A\&HA 6003 | Critical perspectives <br> and practices in the arts |
| :--- | :--- |
| - A\&HA 6482 | Internship or special project |
| - A\&HA 6502 | Doctoral seminar |
| - A\&HA 7502 | Dissertation seminar <br> (two terms) |
| - A\&HA 8900 | Dissertation advisement |

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

Suggested studio electives ( 15 points
minimum): 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)
Professor Sullivan. 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 rigourous 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)Professor Baldacchino. An invitation to share a horizon of objectives in the form of a 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: $\$ 15$.

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. Permission of instructor required. Required seminar for Ed.M. and Ed.D. 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)
Professor Sullivan. 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)
Professor Burton, Professor Sullivan, and Professor Baldacchino. 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, Professor Sullivan. Two required group tutorials 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 department in the semester following successful completion of written certification examination and involves preparation and presentations/dissertation proposal for approval. Sections: (1) Certification preparation, (2) Dissertation proposal preparation.

A\&HA 8900. Dissertation advisement in art education (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. degree.

## Art Education

*A\&HA 4078. Art for classroom teachers: Teaching art to children (3)
Ms. Lifschitz. 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. 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: $\$ 20$.

A\&HA 4081. Curriculum design in art education (2-3)
Professor Sullivan. 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)Professor Sullivan. 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)
Mr. Swift. Prerequisite: A\&HA 4080, A\&HA 4088, or permission of instructor. Required of 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: $\$ 60$.
*A\&HA 4088. Artistic development: Adolescence to adulthood (2-3)
Professor Burton. 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: $\$ 10$.
*A\&HA 4090. Museum education issues I: Culture of art museums (3) Professor Hubard. 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, Ms. Butter, Dr. Jie Sam Foek. 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) Ms. Darvin and Professor Hubard. Prerequisites: A\&HG 4080, A\&HG 4081, A\&HG 4087 and A\&HG 4088. M.A. candidates should plan to take student teaching in their last semester of course work 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)
Ms. Darvin and Professor Hubard. 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 course work 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: TBA.

A\&HA 5081. Curriculum design in art education: Advanced (3)
Professor Baldacchino. 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 PostSecondary and Higher Education. Prerequisite: A\&HA 4081 or consent of instructor. Special fee: $\$ 20$.

A\&HA 5085. Varieties of visual experience: Museums and education (2)
Ms. Darvin. 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)
Ms. Schwartz. 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)
Professor Burton or Ms. Darvin. 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 and Professor Baldacchino. 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)
Professor Baldacchino. 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)
Ms. Darvin. Permission of instructor required. Prerequisite: Substantial teaching and/or arts administration experience. The function of supervision and administration: Effective programs in city, county, and state school systems; in-service education and workshop techniques; school and community relationships; nontraditional settings such as museums, arts councils, etc. Special fee: $\$ 25$.

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

## Studio Art

*A\&HA 4061. Printmaking I: Lithographic processes (Noncredit or 2-3)
Mr. Pellettieri. 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)Mr. Pellettieri. 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)
Mr. James. Development of fundamental painting skills and understandings within the quest for individual expression and style. Oils, acrylics, collage, and watercolor employed. Special fee: $\$ 60$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 4084. Art and technology (Noncredit or 2-3)
Faculty. Through the use of electronic imagery systems (computer graphics, computer animation, video synthesizing, digital video effects), the student develops the ability to create artistic statements utilizing technological means. Offered summers. Special fee: $\$ 25$. Noncredit fee: $\$ 600$ plus special fee.

A\&HA 4089. New media, new forms:
Technological trends in art education (2-3) Faculty. 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 and Mr. Pitts. Enrollment limited. For beginners only. Introduction to the basic techniques of hand building, the potters wheel and slab construction. Surface decoration and threedimensional 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)
Mr . Swift. An exploration into the world of the third dimension through both figurative and abstract styles. There will be classroom discussions plus experimentation in wood and stone carving, clay, plaster, assemblage, and welding. Special fee: $\$ 100$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 4094. Introduction to photography (Noncredit or 2-3)
Ms. Culver, 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: $\$ 25$. 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: $\$ 60$. Noncredit fee: $\$ 600$ plus special fee.
*A\&HA 5061. Advanced printmaking: Lithography (Noncredit or 2-3) Mr. Pellettieri. 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)
Mr. Pellettieri. 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 painting
(Noncredit or 2-3)
Dr. Moser and Mr. James. 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 and Mr. Pitts. 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)
Mr Pellegrin. 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) Faculty and 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, exposure to a professional lab. Special fee: $\$ 100$.
*A\&HA 5890. Exploring creative photography: 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: $\$ 150$. 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: $\$ 60$.

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: $\$ 60$.

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 rating (0)
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) Permission of instructor required. Professional activities in the field under faculty supervision.

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

A\&HA 5202. Fieldwork in art education (1-4) 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)
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)
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) 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) 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)
Permission of instructor required. Research and independent study under the direction of a faculty member.

## ARTS <br> ADMINISTRATION

Program Coordinator/Director:
Professor Joan Jeffri
Program Office: (212) 678-3268
Email: jeffri@tc.edu
Web site: www.tc.columbia.edu/academic/arad
Arts Administration
(Code: TGC)

## Degree Offered:

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.

The Research Center for Arts and Culture acts as a complement and a resource for the program, offering opportunities each year to Arts Administration students with a special interest in research and public policy. The center is committed to applied research in the relatively new disciplines of arts management and arts law, providing the academic auspices for exploration, education, policy-making, and action.

## 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.

## Degree Requirements:

## Master of Arts ( 60 points)

The M.A. degree requires a minimum of 60 points of course work, 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 unual 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)
Ms. Jeffri. 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 4171. Arts administration:

 An introduction to the field (3)Faculty. Focusing on the external and internal environment, running companies and venues, and stated and tacit policies. Attention to the administrator's resources and constraints in both the profit and non-profit sectors.

A\&HG 4173. Arts in context (3)
Professor Dubin. Permission of program coordinator or director required. A seminar and lecture-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; commercial and political activity, administrative regulations concerning arts organizations, and arts-specific contracts.

## A\&HG 4176. Support structures:

 Development and fund-raising in the arts and humanities (3)Ms. Burke, Ms. McIntosh. Permission from program coordinator/director required. A practical exploration of fund-raising 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 4179. Music administration and education: Organizations, issues and careers (3) Faculty. Provides the tools of applied theory and practice of arts administration for musicians, music administrators and music educators. Investigates the management leadership and education practices within musical institutions and career paths within them.

A\&HG 4180. Labor relations in the arts (3) Mr. Leibowitz. 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)
Professor Dubin. 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) Ms. Jeffri. 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) Ms. Jeffri. 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, 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 course-work from business, law, and the arts. Moves from the financial, cultural, 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, 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) Ms. Jeffri. 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 course of program for practicum.

A\&HG 4470. Internship in arts administration and arts education (0 or 3) Ms. Jeffri. 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)
Ms. Jeffri and faculty. Permission from program coordinator/director required. Independent research in arts administration.

A\&HG 4100. Master's essay: Arts administration (0)
Ms. Jeffri. 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 course-work 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.

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 (Noncredit or 3)

A\&HA 4079. Exploring America's cultures (2-3)

A\&HA 4090. Museum issues I: Art museums and their culture (3)

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

A\&HA 5090. Museum 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)


## DANCE AND <br> DANCE EDUCATION

Program Office: (212) 678-8222
Web site: www.tc.edu/a\&h/DanceEd
Dance and Dance Education
(Code: TGD)

## Degree offered:

Master of Arts (M.A.)
This program is currently not accepting applications for admission.

## HISTORY AND EDUCATION

Program Coordinator:
Professor Cally Waite
Program Office: (212) 678-4138
Email: cwaite@tc.edu
Web site: www.tc.edu/a\&h/HistoryEd
History and Education
(Code: TFH)

## Degrees offered:

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 Social Studies in this department. The program in history and education does not lead to public school certification.

## Special Application <br> Requirements/Information:

Sample of historical writing required for Ed.M., Ed.D., Ph.D.. Master's students may begin in the fall or spring only. Doctoral applicants are accepted for the fall term. 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)
Professor Waite. 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)

Faculty. 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 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)
Professor Waite. Permission of instructor required. Methods, principles, and problems
of historical research and interpretation. Designed for students throughout the College undertaking systematic inquires on historical topics.

A\&HH 6574-A\&H 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) Faculty. 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, 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) Permission of instructor required.

A\&HH 6901. Research and independent study (1-8) 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 <br> MUSIC EDUCATION

Program Coordinator:
Professor Harold Abeles

Program Office: (212) 678-3283
Email: abeles@tc.edu
Web site: www.tc.edu/a\&h/MusicEd
Music and Music Education
(Code: TGM)

## Degrees offered:

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Education in College
Teaching of Music (Ed.D.C.T.)

## 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 four 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.

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.

The traditional M.A. program is a post-bachelor'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.

A 40-point Master of Arts offers New York State approved Teacher Certification. Students in this M.A. program take coursework followed by two semesters of carefully guided student teaching in schools that reflects the Music Program's philosophy of authentic and relevant musical pedagogy.

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.

The Ed.D. and the Ed.D. in College Teaching offer preparation for professional careers in a variety of settings. The Ed.D. in College Teaching 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.

## Special Application Requirements/Information:

Applicants for the M.A. 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.

Teachers College Master of Education students wishing to apply to the Doctor of Education Program are required to submit a scholarly paper along with their application for change of degree status. It is expected that most students will choose to submit the scholarly paper completed as the final project for their Ed.M. degree.

Applicants for the Ed.D. normally have previously received a Master of Arts or Master of Music degree. Applicants for the Ed.D. or 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.

Applicants for the Ed.D.C.T. must submit a recent audiotape of their performance or arrange for an audition.

Applications for the Ed.D. and the Ed.D.C.T. are reviewed once each year in the spring for fall admission. See the Admissions section of this bulletin for more information.

## 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 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 course work 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, one of which must be 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
- A\&HM 6001 Teaching and administration of the arts in college music
(2) At least one course from the Research Area (A\&HM 5003, 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 Comprehensive Musicianship Area
(4) At least one course 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 course work, compile and present a portfolio, and demonstrate competent musicianship in performance as approved by the program faculty.

## Master of Arts Leading toward Pre K-12 Initial New York State Certification (40 points)

The M.A. degree leading toward Initial New York State Teacher Certification. 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, Pre K-12.

Teachers College courses required to fulfill state certification requirements (14 points):

- A\&HM 4021 Designing musical experiences for young children
- A\&HM 4029 New technologies in music education
- A\&HM 5020 Foundations of music education
- A\&HM 5022 Young children's musical development
- A\&HM 5025 Creativity and problemsolving in music education
- A\&HM 5026 Music skills and the creative strategies
- 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 or 5033 Comprehensive musicianship I or II (3)


## Required fieldwork courses

(6 points):

- A\&HM 4701 Student teaching-Elementary
- A\&HM 4711
Student teaching-Secondary

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

## Required non-departmental courses: <br> Consult a faculty advisor.

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.

## Master of Arts Program

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. State Professional Certification. Contact Program Coordinator, Harold Abeles, for details (abeles@tc.edu).

IN STEP Master of Arts in Music and Music Education For In-service Teachers
A three year, Summer Master of Arts program that may lead to a New York State Professional Certification. Contact Program Coordinator, Harold Abeles, for details (abeles@tc.edu).

## I. Admission

Admission requires that students must hold a state teaching certificate in music. Those students, who are certified as music educators, but who have not yet met the require ments for New York State (NYS) Initial Certificate, will be able to incorporate those requirements into the Professional Certificate Program. In some cases, meeting both the requirements for the NYS Initial and Professional Certificate may require students to complete course work beyond the minimum requirements for the Professional Certificate alone.
II. Program of Study

A minimum of 32 points is required. Some students' coursework may exceed the minimum number due to professional goals, special interests, or requirements of the NYS initial teaching certificate. 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 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
(B) At least one course from the following (3 points):
- A\&HM 4021 Designing musical experiences for young children
- A\&HM 5025 Creativity and problem-
solving 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 in arts education
- A\&H 5002 Assessment strategies for the arts
- A\&HM 5022 Young children's musical development
- A\&HM 5023 Vocal pedagogy I
(D) At least one course from the Comprehensive Musicianship area, to be selected from the following (3 points):
- A\&HM 5032 Comprehensive musicianship
- A\&HM 5033 Comprehensive musicianship II
(E) Two or three courses from the following list (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
- A\&HM 5052 $\begin{aligned} & \text { Vocal literature } \\ & \text { interpretation }\end{aligned}$
- A\&HM 4059 Jazz Improvisation
- A\&HM 4060 Jazz Improvisation Il
(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 course work. 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 3 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.

Doctor of Education and Doctor of Education in College Teaching of an Academic Subject
(90 POINTS)
Basic requirements include:

1) Satisfactory completion of a program of 90 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 course work 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, course work 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 the world's children (2-3)
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. Enrollment limited to 25. 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: $\$ 30$.
*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) Professor Goffi-Fynn. Recommended for vocal-choral 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. Enrollment limited to 12. 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 (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 5020. Foundations of music

 education (3)Professor Abeles. 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) Professor Allsup and Professor Pogonowski. Permission of instructor required. Designed for preservice and in-service majors to experience and explore critical thinking as a means for establishing a framework for music learning at all levels. Materials fee: $\$ 30$.

A\&HM 5026. Music skills and the creative strategy (2-3)
Professor Allsup and Professor Pogonowski. Permission of instructor required. Enrollment limited to 25. Prerequisite: A\&HM 5025. Designed for preservice and in-service majors to examine and experience problem-solving techniques for developing musical skills within the framework of the creative strategy. Materials fee: $\$ 30$.

A\&HM 5029. Intermediate and advanced applications of new technologies in music education (2-3)
Faculty. Enrollment limited to 12 . Specific demonstrations with new music technology emphasizing the development of creative strategies for music education at various levels. Special fee: $\$ 75$. Noncredit fee: TBA.

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)
Professor 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.

A\&HM 6421. Internship in the supervision and administration of music (1-4) Professor Abeles. Qualified students work as interns with supervisors or administrators in selected sites. Satisfies the internship requirement for administrative and supervisory certification. Provision is made for assessment of field-based competencies in fulfillment of program requirements.

## Research

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 (Noncredit or 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.

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. Young children's musical development (2-3) Professor Custodero. Permission of instructor required. Enrollment limited to 25 . Overview of significant issues and current research regarding the development of musical skills and understandings in children through age 7. 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 affect change and growth will be emphasized.
Special fee: $\$ 50$.

## Comprehensive Musicianship

A\&HM 5032. Comprehensive musicianship I (3)
Professor Pogonowski. Through analysis, composition, critical listening, improvisation and performance, 17 th and 18th century theoretical
constructs are explored, including an overview of the development of harmony and polyphony leading up to these eras. Materials fee: $\$ 30$.

## 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: $\$ 75$.

## Music Performance-Conducting

(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)
Dr. Anagnost. 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 5050. Advanced conducting and interpretation (Noncredit or 2-3) Dr. Anagnost. 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 4056. Chamber music

(Noncredit or 2)
Faculty. 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 4150. Instrumental music instruction I (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 4343. Organ instruction for non-majors (Noncredit or 2) Dr. Henderson. Written permission from the Music Education Program, Room 520A Horace Mann, required. Individual instruction focusing on the rudiments of organ technique, leading to the playing of four-part chorales and
simple trios. Piano proficiency required. With permission of the advisor, students may register continuously for this course. Special fee: $\$ 110$.
*A\&HM 4350. Piano instruction for non-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 understanding of teaching strategies. With permission of the advisor, students may register continuously for this course. Special fee: $\$ 110$.
*A\&HM 4351. Harpsichord instruction I (2)

Faculty. Written permission from the Music Education Program, Room 520A Horace Mann, required. Harpsichord lessons designed especially for keyboard students with no previous harpsichord experience. Emphasis on elements of style and special techniques of performance of representative early keyboard music. With the permission of the advisor, a student may register continuously for this course. Special fee: $\$ 110$.
*A\&HM 4352. Voice instruction for non-majors (2)
Faculty. Written permission from the Music Education Program, Room 520A Horace Mann, required. Beginning voice instruction: technical and musical growth through examination of teaching strategies and repertoire. With the permission of the advisor, a student may register continuously for this course. Special fee: $\$ 110$.

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

A\&HM 5033. Comprehensive musicianship II (3)
Professor Pogonowski. Maximum enrollment: 25. An examination of 19 th century theoretical constructs through analysis, composition, critical listening, improvisation and performance. Materials fee: $\$ 30$.

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 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 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 $s / h e$ chooses to perform in a group with classmates, then $s /$ 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. level.

A\&HM 5150-A\&HM 5172. Instrumental music instruction II (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 above number. 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)
Dr. Henderson. 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 <br> 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)
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)
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)
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)
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)
For music majors only. Professional activities in the field under the supervision of a member of the music education program faculty. Section 2 will focus on early childhood music.

A\&HM 6421. Internship in the supervision and administration of music education (1-4) Professor Abeles. For music majors only. 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\&HM 6481. Internship in the teaching of college music (3)
Professor Goffi-Fynn. Guided experiences in the teaching of music in departments of met-ropolitan-area colleges.

A\&HM 6501. Doctoral seminar in music education (2-3)
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)
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 (music majors only). Different sections will be offered for specific subject areas. Each section will require subjects specific prerequisites

## A\&HM 6971. Research and independent

 study in music education (1-4) 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) 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 two terms.

A\&HM 8900. Dissertation advisement in music education (0)
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\&HA 4079. Exploring America's cultures: Implications for arts education (Noncredit or 2-3)

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

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

A\&H 5500. Pro-seminar in arts and humanities (2)
Concentration on the ethics of social research, examining special problems that arise in both quantitative and qualitative research.

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)

## PHILOSOPHY <br> AND EDUCATION

Program Coordinator:
Professor David T. Hansen

Program Office: (212) 678-4138
Web site: www.tc.edu/a\&h/Philosophy
Philosophy and Education
(Code: TFP)

## Degrees offered:

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 <br> 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 indepth 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 philoso-
phy 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 via the consortium (see section on InterUniversity Doctoral Consortium in this bulletin), 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 via the consortium (see section on InterUniversity Doctoral Consortium in this bulletin), 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 ( 1,2 , or 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 or 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 ( 1,2 , or 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)
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: $\$ 45$.

## 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 Continual 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.

## Cultural Studies

A\&HF 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\&HF 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, psycholanalysis, ideology-critique, identity politics, feminism, queer theory. Special fee $\$ 45$.

## A\&HF 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\&HF 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\&HF 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\&HF 4130. Gender and violence (2-3) Professor Broughton. 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: $\$ 40$.

## RELIGION <br> AND EDUCATION

Program Advisors:
Dr. John Kuentzel, Professor Mary Boys (Union Theology Seminary), Professor Arieh Davidson (The Jewish Theological Seminary)

Program Office: (212) 678-4138
Web site: www.tc.edu/a\&h/ReligEd
Religion and Education
(Code: TFU)
The program in Religion and Education is currently not accepting applications.

The courses in Religion and Education are worked out with one of the advisors from the three cooperating institutions. Drawing on these combined resources each student's program is designed to meet his or her own particular objectives. All courses should be determined with the advice and approval of the student's advisor.

COURSES: ( ${ }^{*}=$ course open to non-majors $)$
*A\&HR 4171-4172. Religion and education in American culture (2-3)
Professor Kuentzel. The educational role of religious ideas, institutions, and movements in American culture.

- A\&HR 4171. 18th and 19th centuries
-A\&HR 4172. 20th century
*A\&HR 5075. Knowledge and human
values (2-3)
Professor Kuentzel. Historical and philosophical perspective on conceptions of knowing, modes of consciousness, and educational aims in 19th and 20th century American thought.

A\&HR 6581. Seminar: Studies in religion and education (1-3)
Professor Kuentzel. Required for all Ed.D. candidates in religion and education at the Jewish Theological Seminary, Teachers College, and Union Theological Seminary. Introduces doctoral students to the history, issues, and research methods in the field of religion and education and provides a collegium for developing proposals for dissertations. Cross listed at Union Seminary as RE 505-506 and at Jewish Theological Seminary as Ed. 9547.

In each of the areas within the department, 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.

## Individualized Studies

A\&HR 4902. Research and independent study (1-6)
Permission from advisor only.
A\&HR 6981. Studies in religion and education (1-6)
Professors Boys and Lukinsky. Required for all Ed.D. candidates in religion and education at the Jewish Theological Seminary, Teachers College, and Union Theological Seminary. Introduces doctoral students to the history, issues, and research methods in the field of religion and education and provides a collegium for developing proposals for dissertations. Cross listed at Union Theological Seminary as RE 505-506 and at Jewish Theological Seminary as Ed. 9547.

A\&HR 7502. Dissertation seminar in religion (3)
Professor Kuentzel. Permission from advisor required. Required of doctoral students in the semester following successful completion of certification examinations.

A\&HR 8902. Dissertation advisement in religion and education (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.

## Arts and Humanities

## SOCIAL STUDIES

Program Coordinator:
Professor Margaret Smith Crocco

| Program Office: | $(212) 678-4083$ |
| :--- | :---: |
| Email: | msc38@columbia.edu |
| Web site: www.tc.edu/a\&h/SocialStudies |  |

Teaching of Social Studies
(Code: TLW)
Degrees offered:
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## 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, the selection and organization of subject matter, curriculum and pedagogy for students of diverse backgrounds, and the application of digital technology to social studies education.

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 and social studies are well suited to that purpose. These strengths, along with the full resources of Teachers College and Columbia University's Graduate School of Arts and Sciences, are available to every student.

## Special Application Requirements/Information:

Standardized tests are not required for social studies programs. However, the GRE General Test is encouraged for those with undergraduate GPAs below 3.5. M.A. students can begin in the fall or summer. Ed.M. and Ed.D. students may begin in any term. Ph.D. students must begin in the fall.

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 New York State 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 only.

Applicants to the Master of Arts programs must have taken at least 24 credits in history (with emphasis on American and/or world history) and/or social sciences (with emphasis on geography, civics, or economics). Those courses that are not listed under a history department, but which have substantial history content, may be counted toward the minimum his tory requirement. All M.A. inquiries should be directed to Mr. Michael Marino, Social Studies Program Office, Box 80, (212) 678-3173 or mpm32@columbia.edu

Applicants to the Master of Education (Ed.M.) degree should be aware that the program generally admits students 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.

An M.A. degree in an appropriate content field or in Social Studies education is required for applicants to the Doctor of Education and Doctor of Philosophy degree programs. In addition to the general 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 required.

Inquiries for the Ed.M., Ed.D. and Ph.D. degrees should be directed to Professor Margaret Smith Crocco, Box 80, Teachers College; telephone: (212) 678-3174; email: crocco@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. It requires a minimum of 32 points and an integrative project. This degree program focuses on social studies teaching in middle and high schools, and fulfills the requirements for the 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 in social studies teacher education
- A\&HW 6530 Curriculum development, research and supervision

Students Should Choose ONE of the Following Courses:

- A\&HH 4070 The history of education
- A\&HW 5030 in the United States (3)

A\&HW 5030 Diversity and the social

- A\&HW 5530 History of American social thought (3)


## 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.

## 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 an integrative project, 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, both city and suburban. A committee of social studies faculty and cooperating professionals from the schools to which students are assigned supervise and evaluate the student teachers' 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

(8-9 points):
Required courses:

- A\&HW 4036 The teaching of social studies
- A\&HW 5037 Alternative models of social studies curriculum

Students should also take one of the following:

| - A\&HW 5030 | Diversity and the social <br> studies curriculum |
| :--- | :--- |
| - A\&HW 5530 | The history of American <br> social thought |
| - A\&HH 4070 | The history of education <br> in the United States |
| - A\&HH 4076 | The history of urban <br> education |
| - A\&HF 4090 | Philosophies of education |

## 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.

## Professional Development Courses

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

Student Teaching (10 points):

- A\&HW 4530 Seminar for student teachers in social studies*
- A\&HW 4729 Observation in 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 masters 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.)

IN STEP Master of Arts in Social Studies for In-service 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 experienced teachers from both public and private schools. Contact Margaret Smith Crocco (crocco@tc.edu).

Please note that all students must take a minimum of 12 points in content/pedagogy and 3 in out-ofprogram courses in professional development.

Typical curriculum for INSTEP includes:
Summer \#1:

- Alternative Models for Social Studies Curriculum (A\&HW 5037)
- Social Studies Content w/Pedagogy Course
- Seminar (A\&HW 5931)


## Summer \#2:

- Social Studies Content w/Pedagogy Course
- Out of Department Course in suitable professional development

Between Summers \#2 and \#3:

- Seminar (A\&HW 5931)
- Action Research Mid-Year Seminar (A\&HW 5232)

Summer \#3:

- Curriculum Development, Research, and Supervision (A\&HW 6530) or Teacher Education in the Social Studies (A\&HW 5031) or History of American Social Thought (A\&HW 5530)
- Social Studies Content w/Pedagogy Course
- Breadth Course in suitable professional development
- Seminar/Action Research (A\&HW 5931)

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, publishers, 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 major field

(15 points minimum):
Required courses:

- A\&HH 4070 The history of education in the United States
- A\&HW 5031 Teacher education in the social studies
- A\&HW 5232 Fieldwork in social studies teacher education
- A\&HW 5530 History of American social thought
- A\&HW 6530 Curriculum development, research, and supervision
Electives:
- A\&HW 5037

Alternative models of social studies curriculum

- A\&HW 5203 Fieldwork in social studies*
- A\&HW 6935 Studies in history and the teaching of history and social studies
*May be taken more than once
Curriculum Study (12 points):
Required courses:
- A\&HW 5030 Diversity in 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.
## Professional Development Courses

 ( $6-9$ points minimum): All students at Teachers College must take three out-ofprogram courses. (For this requirement, a course is defined as one in which 2 points must be earned.)Independent study for the Master's Project (6 points):

- A\&HW 5931 Guided investigations in the
- A\&HW 6030 teaching of social studies education


## Master's Project:

The integrative project 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. project 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 degree 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 the schools and community educational programs.Courses in the major field (15 points minimum):
Required courses:

- A\&HH 4070 The history of education in the United States
- A\&HW 5031 Teacher education in social studies
- A\&HW 5232 Fieldwork in social studies teacher training
- A\&HW 5530 History of American social thought
- A\&HW 6530 Curriculum development, research and supervision

Electives:

- A\&HW 5030 Diversity and the social studies curriculum
- A\&HW 5037 Alternative models of social studies curriculum
- A\&HW 5203 Fieldwork in social studies
- A\&HW 6935 Studies in history and the teaching of social studies

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

- A\&HW 5503 Research paper in social studies
- A\&HW 6503 Doctoral seminar in social studies
- A\&HW 7503 Dissertation seminar in social studies
- A\&HW 8903 Dissertation advisement in social studies
Other offerings:
- A\&HW 6030 Research in social studies education
- A\&HH 6041 Historical method
- A\&HW 6203 Advanced fieldwork:

Social studies

- A\&HW 6903 Research and independent study: Social studies

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

Broad and basic areas of professional scholarship ( 15 points minimum): In consultation with an advisor, 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 course work 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. Course work 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 Requirements for the Degree of Doctor Education bulletin, obtainable from the Office of Doctoral 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 research organization.

Courses in the major field (15 points minimum):

- A\&HW 5031 Teacher education in social studies
- A\&HW 5530 History of American social thought
- A\&HW 6530 Curriculum development, research and supervision


## Electives:

- A\&HW 5030 Diversity and the social studies curriculum

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 at both Teachers College and the Graduate School of Arts and Sciences.

Research methods students are encouraged to take courses in quantitative, qualitative, and historical research methods (18 points minimum):
Required Courses:

- A\&HH 4070 The history of education $\begin{aligned} & \text { in the United States }\end{aligned}$
- A\&HH 6041 Historical method
- A\&HW 5503 Research paper in social studies
- A\&HW 6503 Doctoral seminar in social studies
- A\&HW 7503 Dissertation seminar in social studies
- A\&HW 8903 Dissertation advisement in 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: Social studies
- A\&HW 6903 Research and independent study: Social studies
- A\&HW 6935 Studies in the history and teaching of social studies

Altogether students must complete a minimum of 15 points in research methods course work.

## 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. 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)
Faculty. Basic classroom methods for teaching social studies in secondary schools; teaching resources and aids; assessment and testing.
*A\&HW 5030. Diversity and the social studies curriculum (3)
Professor Serrano. Curriculum theory and instructional methods related to teaching secondary school social studies in the diverse classroom. Particular attention paid to gender and multicultural issues in urban settings.

A\&HW 5031. Teacher education in social studies (3)
Professors Crocco. Problems, issues, and new directions in teacher education in social studies.
*A\&HW 5035. History of the social studies since 1880 (3)
Faculty. 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. Alternative models of social studies curriculum (3)
Faculty. Examination of alternatives to conventional curricular arrangements in social studies, including attention to oral history, interdisciplinary strategies, service learning, economic decision making, and civics.
*A\&HW 5530. History of American social thought (3)
Professor Crocco. History of American social thought as it has influenced and been influenced by theories of education and patterns of educational practice.
*A\&HW 6530. Curriculum development, research and supervision (3)
Professor Serrano. 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)
Faculty. Particular attention to problems of conceptualization and interpretation involved in

## Arts And HUMANITIES

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.
*A\&HW 4033. History and geography of Europe since 1914: Selected topics (3) Faculty. 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)
Faculty. 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: Survey of modern history and cultural geography ( $1-3$ ) Dr. Knapp and Dr. Martin. An overview of central themes in the modern history, geography, and culture of China, Japan and Korea. Also offered as on-line course.
*A\&HW 4038. The study of American history and geography (2-3)
Faculty. 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 ratification, 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)
Professor Crocco. 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 and faculty. Selected topics in the teaching of secondary school economics that align with main themes of New York State social studies curriculum.

## Independent Research, Fieldwork and Internships

A\&HLW 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 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) Professor Crocco and Mary Marshall Clark. 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)
Professor Crocco. Permission of instructor required. For advanced students. Supervised field work, individual conferences and group seminar.

A\&HW 5430. Internship in the teaching of history and social sciences (1-3) Faculty. Permission of instructor required. Ordinarily in secondary schools, community colleges, teacher training programs or publishing work.

## A\&HW 5503. Research paper

Required for doctoral students (1-3)
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.
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.

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.


## TEACHING <br> OF ENGLISH

## Program Coordinator: <br> Professor Janet L. Miller

Program Office: (212) 678-3070
Web site: www.tc.edu/a\&h/EnglishEd
Teaching of English
(Code: TLE)

## Degrees Offered:

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.)

## 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 individualized programs of study.

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). 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 rec ommended 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 ("in-service") 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 (Transitional B)

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

## M.A. in the Teaching of English (IN STEP Program for In-Service Teachers)

IN STEP (In-Service Teacher Education Program) is offered to in-service 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 IN STEP 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 each summer, taking special classes offered only to IN STEP students. Classes offered earn students a total of 17 points for the first two summers and 7 points for the final summer. In addition to the 24 points offered during the summers, students must enroll in the Critical issues for In-service teachers seminar and complete 7 points (three classes) on their own at Teachers College during the fall and spring semesters.

## the Teaching of English leading to

 an Initial Certification in New York State (M.A. Degree, 38 points)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 values, and looks for 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
- 3 college-approved foundation courses (2-3 points each) in History/Philosophy of Education, Disabilities/Special Education, and Human Development/Psychology
- One Detection \& Reporting of Child Abuse and School Violence Prevention (See Teacher Education section of this bulletin for details.)
- 2 semesters 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 School Support Services). If you choose to take a language class as an elective toward your degree, it must be a graduate level course.
- 2 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 most 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, as opposed to the M.A. degree in Teaching of English.

## Doctor of Education

The primary purpose of our doctoral program is preparation for and implementation of research and scholarly activities within 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. Through these experiences, students will 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 pedagogical perspectives.

Each student, upon entry into the program, is assigned an academic advisor who will advise on program plan, certification exams, and all coursework.
*We are currently not accepting applications for the Ph.D. program.

## 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, Children's and Adolescent Literature, Theory and Criticism, and Media Studies. We look carefully at undergraduate institution and GPA, letters of recommendation (minimum of two (2); 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, and practice in the teaching of English. Special emphasis is placed on classroom-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, if possible, 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 in-service 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 also required to submit a writing sample, two letters of recommendation and partake in a personal interview session with faculty.

## Degree Requirements

## Master of Arts <br> (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 later 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.

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 \& cultural contexts (2-3)
*Taken as a 6 credit 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 \& technologies in the secondary English classroom (3)
- A\&HE 4155 Critical issues in the secondary English classroom (2-3)
- 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 usually 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 NY State requirements for classes in History/Philosophy of Education, Disabilities/Special Education and Human Development/Psychology if you have not had previous college level coursework in those areas. 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.

[^0]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 primarily engaged in observation, group work with students, conferencing, and some 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.

During both semesters, the student teaching experience is accompanied by A\&HE 4750, Supervised teaching of English and A\&HE 4751, Fieldwork and observation on 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 three occasions each semester. Supervisors talk with student teachers before and after each observation and consult with them on an individual basis regarding their progress.

Retreats-Every year the English Education Program sponsors a retreat during the fall
semester. The retreat is an in-depth introduction to the fall core courses, and attendance is required. The retreat is typically held on weekdays; thus, we ask that students make accommodations with their employers as soon as possible. The cost of the retreat is absorbed in the course fees.

## 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\&H 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 graduate-level 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
- A\&HE 4052 Adolescents and
- literature (3)
- A\&HE 4053 Cultural perspectives
- A\&HE 4056 Feminist perspectives
and literature (2-3)
- A\&HE 4058 English methods (3)
- A\&HE 4100 Drama and theater (3)
- A\&HE 4150 Teaching literacies in secondary maths, sciences, and 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 Writing: Fiction and
- 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 (3)
- A\&HE 4561 Teaching narrative and story (3)
- A\&HE 4751 Fieldwork and observation in secondary English (1)
- A\&HE 4904 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" texts in English classrooms (3)
- A\&HE 5154 Rhetoric and teaching (3)
- A\&HE 5204 Fieldwork in teaching of English (1-6)
- A\&HE 5500 Technologically mediated literacies (3)
- A\&HE 5504 Research paper: Teaching of English (3)
- A\&HE 5514 Reader's responses: Research,
- A\&HE 5518 Teaching English in diverse social and cultural contexts
- A\&HE 6011 The politics of teaching
- A\&HE 6015 College teaching of English (3)
- A\&HE 6151 Narrative research in

English education (3)

- A\&HE 6204 Advanced fieldwork in teaching English (1-6)
- A\&HE 6404 Internship in college teaching
- 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

## ARTS AND HUMANITIES

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.

AGHE 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) under taken;
(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

Program Plan-During the first year of study, students file a Program Plan \& 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.

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 90 point Ed.D. degree may transfer a maximum of 40 points and will thus complete at least 50 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.

Required Courses-All doctoral students are required to complete the following courses:

- A\&HE 5504 Research paper: Teaching of English*
- A\&HE 6015 College teaching of English**
- A\&HE 6504 Doctoral seminar: Teaching of English***
- A\&HE 7504 Dissertation seminar: Teaching of English
- A\&HE 8904 Dissertation advisement in the teaching of English (1)
* Students who have completed A\&HE 5504 for the Ed.M. degree at Teachers College have satisfied the requirement.
** For students seeking the Ed.D.C.T.
*** Students must enroll in A\&HE 6504 at least once; it may be taken more than once.

Research Methods-A minimum of 12 points of sequential research methods courses. These may include:

- A\&HE 5149 Writing research: Methods and assumptions
- A\&HE 5150 Research in practice
- A\&HE 6151 Narrative research in English Education

Breadth Courses-Students should take a minimum of three courses outside the English Education Program (Courses not designated A\&HE).

Certification Exams-Doctoral students in the English Education Program are required to write two certification examinations, a major exam and a minor exam. The terms major and minor are used to emphasize a difference in focus. The major certification exam usually focuses on the historical breadth of English Education, whereas the minor certification exam takes a more refined focus and directly relates to the student's interest in a specific area of inquiry. The policy of the Office of Doctoral Studies is that students are required to complete a minimum of 20 points after taking the certification exam for the first time, including the points taken during the term in which that exam was taken.

Dissertation Proposal-The doctoral dissertation proposal consolidates the work students have done in courses, professional reading, and the two certification examinations. It is a 30 to 50 -page document, which outlines a coherent account of the work a student wants to undertake for dissertation research.

Dissertation-The doctoral dissertation evolves out of the course work in which students 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 students write their dissertations, they enroll in A\&HE 8904, Dissertation advisement in Teaching English, which is designed to help students shape the writing of the following dissertation components: review of literature, research methodology, data analysis and implications of the research.

Candidates should visit the Office of Doctoral Studies to obtain information about the latest procedures, deadlines, and documents.

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 nonliterary texts with emphasis on the relations of texts and readers. Special fee required.

A\&HE 4100. 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 (3)
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 workshop. Special fee required.

A\&HE 4158. Writing: Poetry (3)
Faculty. A poetry writing class combined with close readings of selected contemporary 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 4561. Teaching narrative
and story (3)
Faculty. An introduction to narrative theory and constructing stories.

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)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 literacy 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 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\&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 question and area of inquiry. Special fee required.

A\&HE 5514. Readers' responses:
Research, theory and practice (3)
Faculty. This course is an advanced seminar for students exploring research issues related to an examination of reading processes. 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 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 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 seminars (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 proposal seminar in teaching 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

 teaching 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, current tuition rate for each term.

## TEACHING OF <br> ENGLISH TO SPEAKERS <br> OF OTHER LANGUAGES

Program Coordinator:
Professor James E. Purpura
Program Office: (212) 678-3795
Email: jp248@columbia.edu
Web site: 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 updated information on the TESOL Program in Japan, consult the Tokyo web page at: www.tc.columbia.edu/a\&h/Tesol-Japan or see the program section in this bulletin.

For updated information on the TESOL
Certificate Program, a six-week intensive noncredit program, consult the TESOL Certificate Program web page at: www.tc.edu/a\&h/TesolCert
Teaching of English to Speakers
of Other Languages (TESOL)
(Code: TLZ)

## Degrees Offered:

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

## 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 research, theory 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
- Approaches to language teacher education
- Second language acquisition
- Second language assessment
- Classroom interaction
- Second language literacy
- Language program evaluation
- Technology and language learning

Graduates from the TESOL program typically teach ESL or EFL students in elementary or secondary schools, in colleges or universities, in language schools or institutes 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 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 language to adults. The CLP serves as an on-site language education lab in which students enrolled in the TESOL and Applied Linguistics programs teach the courses, help administer the program, and use the CLP as a setting for empirical inquiry. For more information on the CLP, see the web site at www.tc.edu/tesol/CLP

## Special Application

## Requirements/Information:

Applications will be accepted for the fall and spring application deadlines as advertised by the College. 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 course work or seek help from the TC Writing Center. All non-native speakers of English, including those who have an undergraduate degree from an Englishmedium 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 20 on the speaking and writing sections and a minimum of 25 on the reading and listening sections;
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).


## Degree Requirements:

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

The TESOL program offers two tracks in the Master of Arts program.

## 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 Classroom practices (3)
- A\&HL 4085 Pedagogical English grammar (3)
- A\&HL 4087 Second language acquisition (3)
- A\&HL 4088 Second language assessment (3)
- A\&HL $4101 \quad$ Phonetics and phonology (3)
- A\&HT 5360

A\&HT 5379 and Specialized practica for A\&HT 5381 TESOL teachers - minimum of two (6)

- TESOL workshops (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.

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 project

## Master of Arts with K-12

 Certification Track (38-39 points)The TESOL K-12 Certification Program offers a 38-39 point minimum Master of Arts degree in TESOL leading toward Initial New York State Teacher Certification. There are two courses of study, one for preservice students (38) and one for in-service students (39) who are Peace Corp Fellows. These courses of study are for students wishing to teach in the New York public schools. Students wishing to teach in a public school in another state are advised to consult the certification requirements for that state.

Required Courses for Preservice 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)
- A\&HT $4776 \quad$ Supervised student
- A\&HT 4777 teaching, K-6 (3)
teaching, 7-12 (3)
- A\&HL 4085 Pedagogical English
- A\&HL $4101 \quad$ Phonetics and phonology (3)
- A\&HL 4087 Introduction to second language acquisition (3)
- A\&HL 4088 Second language assessment (3)
TESOL workshops (minimum of 3 for $0-1$ point each).

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

- A course in Special Education
- A course in Bilingual Education
- A breadth course in consultation with a faculty advisor
- TESOL and Applied Linguistics electives to be chosen with faculty advisor's approval (3)

Required Courses for In-service Peace Corps Fellow Students:

- A\&HT 4076 TESOL methodologies for K-6 (3)
- A\&HT 4171 TESOL methodologies for 7-12 (3)
- A\&HT 4077 Classroom practices (3)
- A\&HT 5381 Specialized practicum
- A\&HT 5380 Specialized practicum for TESOL teachers: In-service teaching I (3)

Specialized practicum for TESOL teachers: Inservice teaching II (Prerequisite A\&HT 5380) (3)

- A\&HL 4085 Pedagogical English
- A\&HL 4101 grammar (3)
- A\&HL 4087
- A\&HL 4088 Second language acquisition (3)
assessment (3)
TESOL workshops (minimum of 3 for 0-1 point each).

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

- A course in Special Education
- A course in Bilingual Education
- One elective breadth course chosen with advisor's approval

TESOL and Applied Linguistics Electives (3). To be chosen with faculty advisor's approval.

Exit requirement: Final project
Additional Requirements for all TESOL K-12
Students, both preservice and in-service Peace Corps Fellows:

To be certified by New York State, additional requirements include passing the New York State teacher examinations. Please see the Teacher Education section of this bulletin for details.

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. Exemptions based on prior course work 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
- A\&HL 5575
- A\&HL 6587

Research literacy in applied linguistics and TESOL
Seminar in second language acquisition: Acquisitional and cross-cultural pragmatics

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 Qualitative research in
classrooms and teaching (2-3)
- HUDM 4050 Introduction to
measurement (2-3)
- HUDM 4122 Probability and statistical
inference (3)
- HUDM 5123 Linear Models and

Lerimental design (3)

- ITSF 4092 Qualitative research and evaluation in international education (3)
- ITSF 5000 Methods of Inquiry:

Ethnography and participation (or ITSF 5001 or 5002) (3)

- ORLJ 4009 Understanding behavioral research (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, teaching one of the language skills, language in the content areas, ESL/EFL materials development and curriculum design, 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 require ments: 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 Qualitative research in classrooms and teaching (2-3)
- HUDM 4050 Introduction to measurement (2-3)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5123 Linear models and experimental design (3)
- ITSF 4092 Qualitative research and evaluation in international education (3)
- ITSF 5000 Methods of Inquiry: Ethnography and participation
(or ITSF 5001 or 5002) (3)
- ORLJ 4009 Understanding behavioral research (3)


## Doctoral Preparation:

Doctoral preparation involves three successive stages:

1. Exposure to basic research methods,
2. Identification of dissertation topic, and
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 the 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: Applied linguistics (1-3 each course)
- A\&HL 5507 Research paper: Applied linguistics and TESOL (1-3 each course)
- A\&HL 6501 Doctoral seminar: Applied linguistics (1-3 each course)
- A\&HL 6507 Research paper: Applied linguistics and TESOL (1-3 each course)
- A\&HL 7501 Dissertation seminar: Applied linguistics (1-2 each course)
or
- A\&HL 7507 Dissertation seminar: Applied linguistics and TESOL (1-3 each course) or
- A\&HT 5505 Research paper: TESOL (1-3 each course) or
- A\&HT 6505 Doctoral seminar: TESOL (1-3 each course)
- A\&HT 7505 Dissertation seminar: TESOL (1-2 each course)
- 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.

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

## General Courses

## A\&HT 4076. TESOL methodologies

 for K-6 (3)Professor Hawkins. Introduction to activities, materials, and principles particularly suited to students in elementary schools. Special fee: $\$ 20$.
*A\&HT 4077. TESOL classroom practices (3)

Faculty/staff. 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/staff. 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/staff. 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/staff. Introduction to the systematic observation of teaching in diverse contexts. Special fee: $\$ 20$.
*A\&HT 4089. Teaching writing to ESL students (3)
Faculty/staff. 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 6-12 (3)
Professors Hawkins. 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 Hawkins. This course examines subject matter education for ESL students in the $\mathrm{K}-12$ 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/staff. Developmental ESL for nonnative 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 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 assess-
ment 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 following practica are designed to enable student teachers to apply theory to classroom practice. The credit hours for practica do not accurately reflect the time commitment they require. In addition to teaching from 6 to 12 clock hours per week, student teachers must set aside 3 hours per week for seminars and from 6 to 10 hours per week for teaching preparation, observation, and individual conferences to discuss their teaching.

A\&HT 4776. Supervised student teaching in TESOL: K-6 (3)
Faculty/staff. 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: 6-12 (3)Faculty/staff. 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 12 th 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 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: $\$ 10$.

## A\&HT 5380. Specialized practica for

 TESOL teachers: In-service teaching I (3) Faculty/staff. Permission of instructor required. Students interested in working toward a New York State teaching certification in TESOL and who are currently teaching full-time in the public schools. Special fee: $\$ 10$.A\&HT 5383. Specialized practica for TESOL teachers: In-service teaching II (3) Faculty/staff. Prerequisite: A\&HT 5380 and permission of instructor required. Students interested in working toward a New York State teaching certification in TESOL and who are
currently teaching full-time in the public schools. Special fee: $\$ 10$.

## Workshops

Faculty/staff. 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 4161. Counseling learning/ community language learning
- A\&HT 4162. Small group activities and cooperative learning
- A\&HT 4163. Role playing and simulations in language learning
- 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 4170. Drill vs. The approach to language learning
- 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 metholodogies

A\&HT 4817-A\&HT 4819. Experiences in learning another language (Noncredit, 0 or 1 point each)
Faculty/staff. 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 4817. The silent way
- A\&HT 4818. Counseling learning/ community language learning
- A\&HT 4819. Trends in language teaching

A\&HT 4860-A\&HT 4880. Specialized TESOL materials (0-1)
Faculty/staff. 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/staff. 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 (1-6) Faculty/staff. 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/staff. 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. Discourse analysis:
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: Applied linguistics (1-3 each course)
A\&HL 5512. Research perspectives on language testing (3)
A\&HL 5515. Advanced topics in applied linguistics I (3)
A\&HL 5516. Advanced topics in applied linguistics II (3)
A\&HL 5518. Teaching English in diverse social/cultural contexts (3)
A\&HL 5519. Instructed SLA and assessment (3)
A\&HL 5575. Research literacy in applied linguistics and TESOL (3)

A\&HL 5581. Psycholinguistic dimensions of SLA (3)
A\&HL 5582. Sociolinguistic dimensions of SLA (3)
A\&HL 5586. Interlanguage phonology (3)
A\&HL 5587. Interlanguage syntax (3)
A\&HL 5588. Trends in SLA research (3)
A\&HL 6087. Advanced SLA (3)
A\&HL 6201. Advanced fieldwork in applied linguistics (1-6)
A\&HL 6501. Doctoral seminar: Applied linguistics ( $1-3$ each course)
A\&HL 6587. Seminar in second language acquisition: Acquisitional and cross-cultural pragmatics (3)
A\&HT 7505. Dissertation seminar: TESOL (1-3 each course)

See also:
For additional acceptable courses in teaching methods and practica, see the listing under TESOL program (Teaching English to Speakers of Other Languages) and Bilingual Education.

## TEACHING OF ENGLISH <br> TO SPEAKERS OF OTHER

 LANGUAGES - JAPANProgram Director:
Dr. Terry Royce
$\begin{array}{ll}\text { Program Office: } & \text { (81)-3-3221-9771 (Tokyo) } \\ \text { Email: } & \text { troyce@tc-japan.edu }\end{array}$
Web site: www.tc-japan.edu
Teaching of English to Speakers of Other Languages (TESOL—Japan)
(Code: TLX)

## Degree Offered:

Master of Arts (M.A.)

## Program Description:

The TESOL program also 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 are able to transfer between the New York and Japan TESOL programs subject to advisor approval. All offerings are in English, and applications are accepted on a rolling basis.

For those interested in the off-campus TESOL M.A. in Tokyo, please contact:

Dr. Terry D. Royce,
Teachers College, Columbia University (Japan),
Mitsui Seimei Bldg. 4F.
2-21-2 Misaki-cho, Chiyoda-ku, Tokyo, JAPAN 101-0061
Ph: (81)-3-3221-9771
Fax: (81)-3-3221-9773
Email: troyce@tc-japan.edu
Web site: www.tc.japan.edu

## TEACHING <br> OF <br> SPANISH

Program Advisor:
Gerardo Pina Rosales
Program Office: (212) 678-8101
Web site: www.tc.edu/a\&h/Spanish
Teaching of Spanish
(Code: TLS)
The program in Teaching of Spanish is currently not accepting applications.

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

## Doctoral Preparation

In order to encourage doctoral students to progress through the appropriate stages, a series of seminars is offered. Progress through these stages usually involves enrollment in a sequence of seminars such as the following:

- A\&HS 5506. Research paper in the teaching of Spanish (1-3)
- A\&HS 6506. Doctoral seminar in the teaching of Spanish (1-3)
- A\&HS 7506. Dissertation seminar in the teaching of Spanish (1-2)
- A\&HS 8906. Dissertation advisement in the teaching of Spanish (0)

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

## Independent Research, Fieldwork and Internships

A\&HS 5206. Fieldwork in teaching of Spanish (1-6)
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\&HS 6206. Advanced fieldwork in teaching of Spanish (1-6)
Permission of instructor required. See description for A\&HL 5206.

A\&HS 6406. Internship in college teaching of Spanish (1-6)
Opportunities in teaching direct-method conversational Spanish and in projects in distance learning. Students must inquire to see if opportunities are available during any given semester.

# Biobehavioral Sciences 

PROGRAMS:
MOVEMENT SCIENCES AND
EDUCATION
Physiology
Applied Physiology
Curriculum and Teaching
in Physical Education
Motor Learning
Physical Education
Kinesiology
NEUROSCIENCE AND EDUCATION 55
SPEECH AND LANGUAGE
PATHOLOGY


## 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 Speech and Hearing Center, 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:

Ronald DeMeersman
(Movement Sciences and Education:
Applied Physiology, Neuroscience, and
Education)
Antoinette Gentile
(Movement Sciences and Education:
Motor Learning, Neuroscience, and
Education)
Andrew M. Gordon
(Movement Sciences and Education:
Motor Learning, Neuroscience, and
Education)
John H. Saxman
(Speech-Language Pathology,
Neuroscience, and Education)
Stephen Silverman
(Movement Sciences and Education:
Physical Education)

## ADJUNCT PROFESSORS:

Thomas Murry
(Speech-Language Pathology,
Neuroscience and Education)
Lorraine Ramig
(Speech-Language Pathology,
Neuroscience and Education)
Susan Schwager
(Movement Sciences and Education:
Physical Education)
Jaclyn Spitzer
(Audiology)
Ronald Tikofsky
(Speech-Language Pathology,
Neuroscience and Education)

## ASSOCIATE PROFESSORS:

## Peter Gordon

(Speech-Language Pathology,
Neuroscience and Education)
Honor O'Malley
(Audiology, Neuroscience and Education)

## ADJUNCT ASSOCIATE PROFESSORS:

Mark Budde
(Speech-Language Pathology)
Sarah Doolittle
(Movement Sciences and Education:
Physical Education)
Dympna Gallagher
(Movement Sciences and Education:
Applied Physiology)
Terry Kaminski
(Movement Sciences and Education:
Motor Learning)
Andrew McDonough (Movement Sciences and Education
Motor Learning)
Jo Ann Nicholas
(Speech-Language Pathology and Audiology)
Lori Quinn
(Movement Sciences and Education Motor Learning) Justine Joan Sheppard (Speech-Language Pathology, Neuroscience and Education) Prithui Raj Subramaniam (Movement Sciences and Education Physical Education)
Karen B. Wexler
(Speech-Language Pathology) Lesley Wolk
(Speech-Language Pathology)
Adrienne Stevens Zion
(Movement Sciences and Education Applied Physiology)

## ASSISTANT PROFESSORS:

Karen Froud
(Speech-Language Pathology,
Neuroscience and Education)
Chris J. Hass
(Movement Sciences and Education
Applied Physiology)
Erika Levy
(Speech-Language Pathology,
Neuroscience and Education)
ADJUNCT ASSISTANT PROFESSORS:
Karen Reznik Dolins
(Movement Sciences and Education:
Applied Physiology)
Carol M. Kaufman
(Speech-Language Pathology)
Roger A. Muzil
(Movement Sciences and Education:
Motor Learning)
Ashwini K. Rao
(Movement Sciences and Education:
Motor Learning)
James Rose
(Movement Sciences and Education:
Physical Education)

## FULL-TIME LECTURER:

Catherine Crowley
(Speech-Language Pathology)

## INSTRUCTORS:

Cynthia S. Cohen
(Speech-Language Pathology)
Pamela Cohen
(Movement Sciences and Education:
Motor Learning )
Gregory James Gates
(Movement Sciences: Applied Physiology)
Christie Kaplan
(Speech-Language Pathology)
Gail Morris-Schoenfeld
(Speech-Language Pathology)
Carol Tompkins
(Speech-Language Pathology)
Michael Soupios
(Movement Sciences and Education:
Motor Learning)
Priska Gysin Peier
(Movement Sciences and Education: Motor Learning)

CLINICAL INSTRUCTORS:
Bernadine Gagnon
(Speech Language Pathology)
Jo Ann Nicholas
(Director of the Edward D. Mysak
Speech and Hearing Center)
Elise Wagner
(Speech-Language Pathology)
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.

## Movement Sciences and Education

The Movement Sciences and Education area of study includes the following sub-specialties: Applied Physiology; Motor Learning; Physical Education; Curriculum and Teaching in Physical Education; Kinesiology.

## APPLIED PHYSIOLOGY

Program Coordinator:
Professor Ronald DeMeersman

| Program Office: | $(212) 678-3325$ |
| :--- | :--- |
| Email: | RED13@columbia.edu |

Web site: www.tc.edu/bbs/Movement
Applied Physiology
(Code: TRA)

## Degrees offered:

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.

## CURRICULUM AND <br> TEACHING IN PHYSICAL EDUCATION

Program Coordinator:
Professor Stephen Silverman
Curriculum and Teaching
in Physical Education
(Code: TRC)

## Degrees Offered:

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

## MOTOR LEARNING

Program Coordinators:
Professors Ann Gentile and Andrew Gordon
Program Office: (212) 678-3325
Emails:
gentile@tc.edu; agordona@tc.edu

Motor Learning
(Code: TRM)

## Degrees offered:

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 |

## Physical Education <br> (Code: TRP)

## Degree offered:

Master of Arts (M.A.)

## Biobehavioral SCIENCES

## KINESIOLOGY

Program Coordinator:
Professor Stephen Silverman
Program Office: (212) 678-3324
Email: ss928@columbia.edu
Kinesiology
(Code: TRK)

## Degree offered:

Doctor of Philosophy (Ph.D.)
For more information about special application requirements, program description and degree program requirements for the Ph.D. program in Kinesiology, contact Professor Silverman at ss928@columbia.edu.

## Program Description:

There are three specialties in Movement Sciences:

The Applied Physiology concentration focuses on the physiological effects of exercise and disease. The effects of exercise training on cardiovascular processes (such as autonomic nervous systems function and blood pressure regulation), neuromuscular, and biomechanical function are emphasized. Application of study in applied physiology is made to improve health and physical fitness across both healthy and disabled populations. Interactions with nutritional factors are also highlighted. Professionals can gain insight into the role of exercise in diagnosis and treatment of health problems of interest to them.

In Motor Learning, 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 life span 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.

Physical education has a long and distinguished history at Teachers College. Teachers College offered one of the first graduate degrees in 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 sciences, 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, including:

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.
3. 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 and Science Education. A list of recommended elective and related courses is available to students in the Movement Sciences office.

## Special Application Requirements/Information:

While students have come from a variety of fields, the following backgrounds are most appropriate: 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 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.

Interviews are required for applicants planning to pursue the doctoral program (although exceptions are made 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 Sciences:

Applied Physiology and Motor Learning.

## Master's Degree Programs

For the M.A. and Ed.M. programs with specialization in Motor Learning or Applied Physiology, students have two options. They may specialize in one of the three areas offered within Movement Sciences (Applied Physiology, Motor Learning, Physical

Education) or in consultation with an advisor, they may arrange a flexibly-designed program of study cutting across specialization in the movement sciences which 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. A culminating project is required for the M.A. and may involve: (a) a scholarly review of research and theory within a topical area drawing application to educational or clinical practice, or (b) a basic or applied research report. 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 include:

- BBS 5060 Neuromuscular responses and
- BBS 5068 adaptation to exercise (2)
- BBS $5068 \quad$ Brain and behavior I: Communication in the nervous system (1-2)
- BBSR 5582 Research design in the movement sciences (3)
- Substantive study in movement sciences including offerings in physical education (minimum 6 points).
- One laboratory course in Movement Sciences (minimum 2-3 points).
- Seminars or tutorials (minimum 2-3 points).
- Individual program in movement sciences, (additional substantive, laboratory, fieldwork, or seminar study) or in related areas outside of movement sciences (minimum 6 points).
- Electives with provision that the total program includes at least three Teachers College courses (for at least 2 points each) outside of the movement sciences.


## 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 program requires 60 points of graduate study. Students can focus on: (a) preparation as a "scholar of practice" 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.

All Ed.M. students must complete a final, culminating project involving either: (a) an applied research report which can focus on clinical or educational issues, or (b) a laboratory research paper. Students intending to continue 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.

For the Master of Education Program, specific requirements for courses, or equivalents transferred from prior graduate study, are:

- BBS 5060 Neuromuscular response and
adaptation to exercise (2)
- BBS 5068 Brain and behavior I: Communication in the nervous system (1-2)
- BBSR 5582 Research design in the movement sciences (3)
- Research preparation: minimally one course selected from BBSR 5504 and BBSR 5595 (2-3).
- Substantive study in the movement sciences including offerings in physical education (minimum 15 points).
- Two laboratory courses (minimum 5-6 points).
- Seminars or tutorials (minimum 5-6 points).
- Individual program in movement sciences (additional substantive, laboratory, fieldwork or seminar study) or in related areas outside of movement sciences (minimum 12 points).
- Electives (for at least 2 points each) (12 points).


## Doctoral Programs

Students seeking admission to the Ed.D. program are customarily admitted to the Ed.M. for at least one year. Formal admission to the doctoral program is based upon level of achievement in course work 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 can be obtained from the secretary in the Movement Sciences office.

Applicants 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.

Specialization in Applied Physiology or in Motor Learning 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 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

## (Applied Physiology)

The goal of the Applied Physiology specialization is to prepare doctoral students to pursue scholarly and scientific work. Students are expected to contribute significantly to the completion of at least one 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 the student's own 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 Sciences faculty.

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 course work can be completed in an efficient and timely fashion.

For the doctoral program with specialization in Applied Physiology, specific course requirements (or equivalents transferred from prior graduate study) include:

- BBS 5060 Neuromuscular responses and adaptation to exercise (2)
- BBS 5068 Brain and behavior I:

Communication in the nervous system (1-2) - BBSR 4095 Applied physiology I (3)

- BBSR 4195 Applied physiology laboratory I (3)
- BBSR 5095 Exercise and health (3)
- BBSR 5194 Applied physiology
- BBSR 5582 Research design in the movement sciences (3) - BBSR 5595 Research seminar in applied physiology (typically, students enroll each semester until degree requirements are completed) (3 points each semester)
- BBSR 5596 Topics in applied physiology (3)
- One additional laboratory course: BBSR 5195 or BBSR 5055 (3)
- Three courses (9) selected from BBS 5055, BBSR 4005, BBSR 4050, BBSR 4055,
BBSR 4060, BBSR 5057, BBSR 5200,
HBSV 5010, HBSV 5011, HBSV 5034,
MSTC 4043, MSTC 4054
- Statistics sequence minimally two courses ( 6 points) from: HUDM 4122, HUDM 5122 and HUDM 5123


## Doctor of Education <br> (Motor Learning )

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, specific course requirements (or equivalents transferred from prior graduate study) are:

## BIOBEHAVIORAL Sciences

- BBS 5060
- BBS 5068
- BBSR 4050
- BBSR 4060
- BBSR 4151
- BBSR 5151 Analysis of biomechanical signals or an approved course in computer programming (3)
- BBSR 5504 Research training in motor learning (2-3 points each semester, continuous enrollment required until completion of degree requirements, typically 18 points)
- BBSR 5582

Research design in the movement sciences (3) Motor learning conference (enrollment required during each year of study towards the Ed.D., minimum 3 points, other enrollments can be noncredit)

- Three enrollments in BBSR 6563, Conference seminar (6)
- Four courses (12) selected from: BBSQ 4047, BBSR 4055, BBSR 4070, MSTC 5000, BBSR 5050, BBSR 5055, BBSR 5057, BBSR 5251
- Three topical seminars (9) selected from: BBSR 5596, BBSR 6563, BBSR 6564, BBSR 6565, BBSR 6571
- Statistics sequence minimum (9):

HUDM 4122, HUDM 5122 and HUDM 5123

- Individual program and electives (22)

Graduate Study/Clinical Practice Traineeships are available for occupational and physical therapists enrolled in or admitted to degree programs in Movement Sciences. 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 carry an award of $\$ 32,000$ in stipend and tuition benefits. The instructional staff in Movement Sciences 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. In addition to scholarship awards, advanced students in the Ed.M. or Ed.D. programs may have an opportunity for funding by serving as research, laboratory or teaching assistants, and conference coordinators.

## COURSES:

## BBS 4032. Neuroscience of human speech

 and language (2)Dr. 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)
Faculty. 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 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)
Professor Gentile. 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) Professor Gentile. 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 Gentile. Study of factors relating to the acquisition and performance of motor skills. Includes review and analysis of appropriate research findings. Corequisite: BBSR 4861.

BBSR 4070. Introduction to the psychosocial aspects of sport and exercise (2-3) Dr. Muzii. 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 (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) Professor DeMeersman. Prerequisite: a course in human physiology. Physiological bases of exercise. Lectures concerning the effects of exercise on the major physiological systems (cellular, cardiovascular, thermoregulatory, pulmonary, renal, body fluids, hormonal).

BBSR 5050. Neurophysiology of motor control and electromyography (3) Faculty. 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)
Professor Gentile. 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 DeMeersman. Prerequisite: BBSR 4095 or equivalent. The role of exercise in diagnosis, prevention, and rehabilitation of health problems such as cardiovascular disease, pulmonary disease, diabetes, obesity, and stress. Interactions with nutrition are stressed.

## 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 4195. Applied physiology laboratory I (3)

Professor DeMeersman and lab assistant. Co/prerequisite: BBSR 4095. The discussion and practice of techniques for collection and analyses of physiologic data (calibration, basal metabolism, body composition, static pulmonary functions, VO2 measurements, physiography). Lab fee: $\$ 100$.

BBSR 5151. Introduction to the analysis of biomechanical signals (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)
Faculty. 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 DeMeersman. 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 (0-2)
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 (0-1) Faculty. Topics and speakers are announced in a separate brochure which may be obtained from the department office.

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)
Professor Gentile. 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.

BBSR 6571. Research seminar in the psychosocial aspects of human movement (3)

Dr. Muzii. Examines research topics, problems, design, and methodologies in the psychosocial study of human movement.

## Fieldwork

BBSR 5200. Fieldwork in movement sciences (1-4)
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)
Professor Gentile. 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 sciences and education (1-6)
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)
Professors Gentile, Gordon, and Kaminski. Permission required. A competency-based approach to the preparation of researchers in the areas of neuromotor control and percept-ual-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)
Faculty. Basic concepts of research design and statistical analysis. Students learn to interpret articles and design projects.

BBSR 5595. Research seminar in applied physiology (3)
Professor DeMeersman/Faculty. 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 sciences (1-9) For advanced students who wish to conduct research under faculty guidance.

BBSR 7500. Dissertation seminar in movement sciences (0-3)

BBSR 8900. Dissertation advisement in movement sciences (0)
Advisement on doctoral dissertation. Fee: equal to 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D. degree.

MSTC 5000. Neurobiology of consciousness, constructivism and information processing (1-3)
See the Department of Mathematics, Science and Technology for course description.

## BIOBEHAVIORAL Sciences

## CURRICULUM AND <br> TEACHING IN <br> PHYSICAL EDUCATION

Program Coordinator:
Professor Stephen Silverman
Program Office: (212) 678-3324
Email: ss928@columbia.edu
Curriculum and Teaching
in Physical Education
(Code: TRC)

## Degrees Offered:

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 course work. 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 course work 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)
Faculty. Review of existing curriculum designs; traditional and new. Systematic development of curriculum plans.

## BBSR 5041. Analysis of teaching in

 physical education (3)Professor Silverman. 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. Meyers. 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) Faculty. 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 Sciences Programs:

BBSR 4070. Introduction to the psychosocial study of human movement (2-3) Professor Muzii. 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 sciences 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 sciences and education (1-4)
Faculty. Permission required. For advanced students prepared to investigate problems.

BBSR 5582. Research design in movement sciences 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 sciences and education (1-9)
Faculty. Permission required. For advanced students who wish to conduct research under faculty guidance.

BBSR 7500. Dissertation seminar in movement sciences 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 sciences and education (0) Faculty. Individual advisement on doctoral dissertation. Fee: equal to 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
Web site: www.tc.edu/bbs/Phys-Ed

## Physical Education

(Code: TRP)

## Degree offered:

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 course work 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.

## Special Application Requirements/Information:

There are no special application requirements for this program.

## 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 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 course work (see below); (b) completion of 100 hours of pre-practica; (c) completion of a full semester of student teaching (BBSR 4700, 3 credits); (d) completion of state-approved courses in Detection and Reporting of Child \& 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 course work 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 pre-

## BIOBEHAVIORAL Sciences

requisites 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 activity 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.

| Courses for physical education teacher certification: |  |
| :---: | :---: |
| - BBSR 4060 | Motor learning (2) |
| - BBSR 4700 | Student teaching in physical education (3) |
| -BBSR 4865 | Tutorial: Motor learning (1) |
| - BBSR 5040 | Curriculum design in physical education (3) |
| -BBSR 5041 | Analysis of teaching physical education (3) |
| -BBSR 5240 | Fieldwork in curriculum and teaching in physical education (6) |
| - BBSR 5543 | Seminar in physical education (3) |
| - BBSR 5582 | Research design in movement science and education (3) |
| -C\&T 4020 | The environments of schools (3) |
| - HBSE 4000 | Introduction to special education (3) |

Courses for physical education teacher certification:

- BBSR 4060 Motor learning (2)
- BBSR 4700

Student teaching in physical education (3)
-BBSR 4865 Tutorial: Motor learning (1)

- BBSR 5040
-BBSR 5041 sical education (3) Analysis of teaching Fieldwork in curriculum and teaching in physical education (6) education (3) Research design in denction (3) The environments of schools (3) education (3)


## NEUROSCIENCE AND EDUCATION

Program Coordinator:
Professor Peter Gordon

| Program Office: | (212) 678-8162 |
| :--- | ---: |
| pgordon@tc.edu |  |
| Email: |  |
| Web site: www.tc.edu/bbs/NeuroSci |  |

Neuroscience and Education
(Code: TKN)

## Degree Offered: <br> Master of Science (M.S.)

## Program Description:

Neuroscience and Education was the first of only two graduate programs 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 clinics. 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.

## Special Application Requirements/Information:

Applications will be considered throughout the year. Interested applicants should contact Professor Peter Gordon at (212) 678-8162 or pgordon@tc.edu for additional information.

## Master of Science (M.S.) Program in Neuroscience and Education

## 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 lease one course in each of the areas below is required.

## Developmental Psychology <br> - HUDK 4020 Theories of human development (3) <br> - HUDK 4024 Developmental psychology: Adulthood and lifespan (2-3) <br> - HUDK 5023 Cognitive development (2-3) <br> - HUDK 5024 Language development (2-3)

## Learning and Cognition

| - HUDK 5097 | Psychology of instruction (3) |
| :--- | :--- |
| - HUDK 5023 | Cognitive development <br> (if not applied toward <br> developmental requirements) |
|  |  |

Psychological Evaluation and Assessment
Two courses in statistics, measurement, or assessment are required. These could include the following:

- HBSK 5320 Individual psychological testing (3)
- HUDM 4050 Introduction to measurement (2-3)


## Educational or Clinical Specialization

Minimally, 15 points of graduate study representing a cohesive sequence of courses in such areas as: audiology, counseling psychology, educational psychology, elementary education, motor learning, nursing, science education, speech pathology and 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 (2)
- BBS $5069 \quad$ Brain and behavior II: Perception, emotion, memory and cognition (1-2)
- BBSQ 4040 Speech and language disorders (3)
- BBSQ 4043 The human nervous

> system (3)

- HBSK 5070 Neural bases of language, and cognitive development (3)
- HBSK 5072 Developmental


## Advanced Courses

Minimally, three courses from those listed below or (equivalents):

- HBSK 5033 Human clinical neuropsychology (3)
- HBSK 5139 Fundamentals of psychopharmacology (3)
- HBSK 5338 Neuropsychology assessment in education and clinical practice (3)
- HBSK 5371 Educational neuropsychology (3)


## Advanced Topical Seminars

- BBSN 5575 Seminar in neuroscience and education (3)
- BBSQ 6517 Seminar: Neuropathologies of speech (3)

Field Work/Case Studies

- HBSK 5274

Field work:
Neuropsychological approaches to reading and learning disabilities (0-4)

- HBSK 5375 Case studies of reading and learning disabilities from a neuropsychological perspective (3)

Note: Courses listed with HBSK prefix may also be listed under the BBSN prefix in the course schedule.

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. It requires a committee of one advisor in the Neuroscience and Education program and another faculty member.

## CLINICAL <br> NEUROPSYCHOLOGY

Clinical Neuropsychology
(Code: TZK)
This program is currently not accepting applications.

For course descriptions below, see the course listing in the Department of Health and Behavior Studies.

HBSK 5033. Human clinical
neuropsychology (3)
Faculty. Permission required. Prerequisite: HBSK 4075 or equivalent

HBSK 5070. Neural bases for language and cognitive development (3) Professor Kirk. Permission required.

HBSK 5072. Developmental neuropsychology (3)
Faculty. Permission required. Prerequisite: HBSK 4075, HBSK 5070, HBSK 5068, equivalent background in basic neuroscience. Also recommended: an introductory course in developmental psychology.

HBSK 5139. Fundamentals of
psychopharmacology (3)
Faculty. Permission required.
HBSK 5375. Fieldwork in reading and cognitive development from a neuropsychological perspective (4)
Faculty. Permission required. Prerequisite: previous courses in neuropsychological and educational assessment. Materials fee: $\$ 100$.

HBSK 5575. Integrative seminar in neuroscience and education (3)
Faculty. Primarily for students in the Neuroscience and Education program during preparation of the final Ed.M. project; others by permission.

HBSK 5905. Research-independent study in neuroscience and education (1-4) Faculty. Permission required.

HBSK 6383. Neuropsychological assessment of children and adults (3) Faculty. Permission required. Prerequisites: HBSK 5033 or HBSK 5070; and HBSK 5320. Special fee: $\$ 150$.

## Advanced Study

HBSK 6904. Research-independent study in neuroscience and education (1-3)
Faculty. Permission required.

HBSK 9410. Supervised internship,
advanced study level (1-6)
Professor Kirk.

## SPEECH AND LANGUAGE PATHOLOGY

Program Coordinator:
Professor John H. Saxman
Program Office: (212) 678-3895
Email: saxman@tc.edu
Web site: www.tc.edu/bbs/SpeechLanguage
Speech and Language Pathology
(Code: TQC)

## Degrees offered:

Master of Science (M.S.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## Program Description:

The programs in Speech-Language Pathology and Audiology offer advanced education and training in the processes of individual human communication (speech, hearing, language and swallowing); 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, twotone suppression, auditory spectral resolution, pitch, and auditory temporal acuity; Professor Saxman - speech and language development and disorder, vocal tract function and dysfunction and life span development of speech processes; Professor Levy- cross-language speech production and perception and secondlanguage speech learning; Professor P. Gordonlanguage acquisition, psycholinguistics, cognitive development in infants and children; Professor Froud- acquired language pathology, neural correlates of normal and abnormal speech and language.

Programs leading to the M.S., Ed.D., and Ph.D. degrees in Speech-Language Pathology prepares 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.

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In turn, many of the program's courses in normal and disordered speech and hearing, and swallowing 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:

Candidates should have a broad liberal arts background with concentration in the biological and behavioral sciences.

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.

Students from diverse academic and experience backgrounds are routinely accepted into the program and encouraged to apply.

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 poten-
tial 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 in SpeechLanguage Pathology

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 75 points of course work in appropriate specified areas for the ASHA CCC-SLP before completion of the M.S., either through course work taken at Teachers College or through an approved distribution of courses completed at Teachers College and at another regionally accredited institutions (including undergraduate course work).

This requirement is in addition to the specific courses and minimum points required by the Teachers College faculty to satisfy the Master of Science degree requirements. Although course credits 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 course work required to satisfy the ASHA certification requirements or selected departmental requirements do not need to be repeated at Teachers College.

Teachers College requires a minimum of 32 points for the Master of Science Degree. 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 Speech science (3)
- BBSQ 4031 Anatomy and physiology for speech, language and hearing (3)
- BBS 4032 Neuroscience of human speech and language (2)
- BBS 5068 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; ITSL 4024 Linguistic foundations of
bilingual/bicultural education; and other courses listed in the program materials.

## Professional Course Work

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 course work in speech-language pathology must be at the graduate level and must include a minimum of 3 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 Course Work

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 <br> disorders (2) |
| - BBSQ 5111 | Assessment and |
| evaluation (3) |  |

## Hearing

- BBSQ 4042 Audiology (2-3: Majors take
course for 2 points only)
- BBSQ 5125 Clinical approaches to aural rehabilitation (3)
- BBSQ 5129 Audiological concepts and principles (1)
- BBSQ 5343 Hearing measurements (1)


## Additional Course Work

Students are required to take a minimum of 3 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 Non-speech communication: Alternative \& - BBSQ 4047 augmentative systems (2) children: Normal and abnormal (3)
- BBSQ 5118 Cleft palate (2-3)
- BBSQ 5119 Alaryngeal speech (1)
- BBSQ 5130
- BBSQ 6111

Assessment \& intervention for dysphagia (2)
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, or to have previously taken equivalent coursework. This course is offered during the fall term.

## Breadth Courses

Students at Teachers College 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 NYS as well as providing bilingual therapy in a private practice where funding comes from the NYC Department of Education or the NYS Education Department.

The requirements for the NYS bilingual extension certificate, as integrated into the Master's of Science program in speechlanguage pathology, are:

- BBSQ 5041 School speech-languagehearing program
- BBSQ 5111 Assessment and evaluation;
- BBSQ 5115 Language disorders in children
- BBSQ 5120 Communication disorders in bilingual/bicultural children
- 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 NYS Education

Department's Target Language Proficiency Test in the student's non-English language and in English. Student 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 Speech and Hearing Center. 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 course work 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 onesemester 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 NYS 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.

## BIOBEHAVIORAL SCIENCES

## 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 various doctoral programs, consult the Office of Doctoral Studies' bulletins, Requirements for the Degree of Doctor of Education and Requirements for the Degree of Doctor of Philosophy sections and request from the program office statements on Ed.D. and Ph.D. programs.

## 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 course work (lectures, seminars, colloquia) and practica training. The formal course work 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 Speech and Hearing Center.

Practical training at the master's and doctoral levels includes lecture/demonstrations, smallgroup 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 Speech and Hearing Center.

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., Ed.M., 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 (2) Dr. Budde and Ms. Cohen. This introductory course will provide a comprehensive overview of augmentative and alternative communica-
tion (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 (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-languagehearing programs (2)

Dr. Kaufman. 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 communi-cation-disordered 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)

BBS 5125. Clinical approaches to aural habilitation of child (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) Ms. 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) Faculty. Prerequisites: Phonetics course and an introductory course in speech pathology. Study of phonological rule disorders and disorders associated with functional and various structural and neurological problems. Critical analysis of research in etiology, testing, and therapy.

BBSQ 5113. Voice disorders (3) Faculty. 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)Dr. Wexler. 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)Ms. 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)Dr. 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) Ms. Crowley. Study of effect of bilingualism, bilingual education, sociolinguistics, psycholinguistics and multicultural perspectives in education on 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)
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 (2-3). 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. Nicholas. 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. Nicholas. 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

## Practicum

Faculty. 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. <br> Regular clinic (3)

Dr. Nicholas (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 (0) 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 (1) Dr. Sheppard. Observation and participation in the evaluation of prespeech 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: $\$ 150$.

## BIOBEHAVIORAL Sciences

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 firstyear 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.

The Bilingual Extension Institute (6)
The Institute is co-sponsored by the Department of Biobehavioral Studies and the Center of Educational Outreach \& Innovation and is approved for non-matriculated, nondegree students. Ms. Crowley, Coordinator.

This Institute satisfies the academic and fieldexperience requirements of the New York State Education Department for the bilingual extension to the teachers of students with speech and language disabilities teaching certificate. It is designed to train students in areas of study that are needed by bilingual speechlanguage clinicians working with culturally and linguistically diverse children and adolescents. Great effort is made to connect lectures, presentations, discussions and hands-on experience in class to the experience of clinical work in schools. In addition, project-based learning brings theory and practice out of the classroom and into the everyday clinical work of the participants (and vice versa). 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 

## PROGRAMS:

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Personality andPsychopatholy
General Psychology


## DEPARTMENTAL MISSION:

The Counseling and Clinical Psychology department prepares students to investigate and address the psychological needs of individuals, families, groups, organizationsinstitutions, and communities. Counseling Psychology focuses on normal and optimal development across the life span, 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:

Robert T. Carter (Counseling)
Madonna G. Constantine (Counseling)
Barry A. Farber (Clinical)
Leah B. Lapidus (Clinical) - Emeritus
Suniya Luthar (Clinical
and Developmental)
Elizabeth Midlarsky (Clinical)
Rosalea A. Schonbar
(Clinical - Emeritus
Derald Wing Sue (Counseling)

## ADJUNCT PROFESSORS:

Xavier Amador (Clinical)
Jesse D. Geller (Clinical)
Jerome W. Kosseff (Clinical)
Judith Kuriansky (Clinical)
Stephen Reisner (Clinical)
Arnold W. Wolf (Counseling)

## ASSOCIATE PROFESSORS:

George Bonanno (Clinical)
Lisa Miller (Clinical)
Marie L. Miville (Counseling)
Christine Yeh (Counseling)
ADJUNCT ASSOCIATE PROFESSORS:
Jill Backfield (Clinical)
Ghislaine Boulanger (Clinical)
Billie Pivnick (Clinical)
Dinelia Rosa (Clinical/Counseling)
Roni Beth Tower (Clinical)

## ASSISTANT PROFESSORS:

George V. Gushue (Counseling)
Sally Hage (Counseling)
Rachel Navarro (Counseling)
Helena Verdeli (Clinical)
ADJUNCT ASSISTANT PROFESSORS:
Stephanie Fagin Jones (Clinical)
Elizabeth Fraga (Counseling)
David Greenan (Counseling)
Merav Gur (Clinical)
Richard Keller (Counseling)
Scott Kellogg (Clinical)
Lisa Kentgen (Clinical)
Michael J. Koski (Counseling)
Samuel E. Menahem (Clinical)
Laura Nisco (Clinical)
Elizabeth Owen (Clinical)
Andrea Safirstein (Counseling)
Lori Siegel (Counseling)
Laura Smith (Counseling)
A. Jordan (Clinical)

Gil Tunnell (Counseling)
Anika Warren (Counseling)
David Yourman (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 Barry A. Farber
Program Office: (212) 678-3267
Email: farber@tc.edu
Web site: www.tc.edu/ccp/Clinical

## Clinical Psychology

(Code: TXC)

## Degrees Offered:

Doctor of Philosophy (Ph.D.)
Master of Science (M.S.) - en passant

## Program Description:

The Clinical Psychology Program offers a course of scholarly/professional 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.

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 this program seek positions in teaching, research, policy, administration, psychotherapy, and counseling. Completing a 95 -point doctoral degree, including an internship, typically takes five to seven years. Practicum work is done in the Teachers College Center for Educational and Psychological 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 discuss 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 two 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 driving goal of the Clinical Psychology Program is to provide rigoroustraining 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 individual faculty web pages)]. Our on-site clinic, The Center for Educational and Psychological Services (CEPS), now functions as both a research and clinical training center. The CEPS 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 life span 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.

The Program shares an in-house clinic (The Center for Educational and Psychological Services) with several other College programs. All clinical psychology doctoral students are staff members in the 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. 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).
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. Thus, most students admitted to the program have engaged, after college, in both supervised psychological research and some type of supervised work in a clinical setting.
3. Graduate Record Examination (GRE): Applicants must submit the results of the GRE Aptitude tests and the GRE Advanced Examinations in Psychology, 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 paper 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 written 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

## Counseling and Clinical Psychology

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.
3. A passing grade on the certification examination (on Research Methods) during the third year of study.
4. A case presentation and accompanying paper during the third year, demonstrating the student's ability to integrate theory, research, and practice.
5. A doctoral dissertation, which must be completed no later than the seventh year after matriculation.

## First Year

During their first year of study, doctoral students typically take the following didactic courses: Ethical and Professional Issues in Clinical Psychology; Psychological Measurement; Applied Regression Analysis; Research Methods; Child Psychopathology; Adult Psychopathology; Development and Psychopathology; and Dynamic Approaches to Psychotherapy. Students also take two semesters of psychological testing and a course in clinical interviewing. Most students begin working with faculty members on research during the first year.

## Second Year

During their second year, students' didactic courses include: Brain and Behavior; Linear Models and Experimental Design; Emotion, Culture and Health; Psychotherapy with Children; History and Systems; Cognitive, Behavioral and Interpersonal Therapies; and Short Term Dynamic Psychotherapy. In addition, students sign up for a full year of research practicum with a faculty member (culminating in an empirical Second-Year Project) and a full-year clinical practicum.

Third Year
Third year didactic courses include Group Dynamics; Family Therapy; Clinical Issues in Working with Diverse Populations; Empirical Bases of Psychotherapy; and Dissertation Seminar. There is also a full year clinical practicum. Most students also elect to take a full year clinical externship.

Fourth and Fifth Year
Fourth year features an optional clinical practicum but is typically devoted to work on the dissertation. Year five is usually spent on a full-year clinical internship.

Elective courses for all students include Forensic Psychology; Advanced CognitiveBehavioral Therapy; Women and Mental Health; Family Counseling and Therapy; The Psychology of Loss and Trauma; Psychotherapy; Religious Diversity, and Spirituality; and Assessment and Treatment of Alcohol and Chemical Dependency.

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.

The program currently does not have NIMHfunded traineeships to offer. Most doctoral students with significant financial need obtain help in the form of a tuition scholarship that covers approximately $20-40 \%$ of the cost of a year's tuition; some also receive stipends from faculty research grants. Most students also work part-time 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)Professor Luthar. This course is designed to provide an introduction to multidisciplinary approaches to mental health including clinical psychology, school psychology, and pediatric psychology.

## CCPX 4010. Psychological perspectives

 on critical social problems (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 life span: stress, defense mechanisms, and coping.

CCPX 4032. Assessment and treatment of alcohol and chemical dependency (3) Faculty. 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 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. Critical perspectives on nontraditional psychotherapies (3)
Dr. Menahem. Overview and evaluation of nontraditional psychotherapeutic approaches including existential psychotherapy, Eriksonian hypnosis, transpersonal therapy, and Easternoriented models.

## 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) Ms. Silverbush. 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) Faculty. Stressors, manifestations, and treatment of psychopathology in women; theories of Klein, Horney, Thompson, and others.

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 clinical

psychology (3)
Faculty. Supervised practice in field placements for M.A. students in applied or general psychology.

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)
Faculty. Limited to doctoral students in clinical psychology. Orientation to program and field; ethical and professional issues.

CCPX 5032. Adult psychopathology (3) Professor Midlarsky (Section 1), Faculty (Section 2 open to doctoral candidates in psychology; others by permission). 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)
Dr. Reisner. 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.

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. Boulanger. Open to doctoral candidates in psychology; others by permission. 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. Introduction 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. Permission required. 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)

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.

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)
Faculty. 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)
Faculty. Limited to doctoral candidates in clinical psychology. Supervised practice in
field placements. Sections: (1) Adult Externship (Faculty), (2) Child Externship (Professor Miller).

CCPX 5330. Principles and techniques of clinical assessment (3)
Faculty. 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)
Faculty. Permission required. Didactic focus on personality assessment, including projective measures; supervised practice in comprehensive psychological assessment as staff member of the CEPS.

CCPX 5334. Clinical assessment and research with children and adolescents (3) Professor Verdeli. 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. Pivnick. 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: Children from diverse backgrounds (3) Professor Miller. Open to all students. 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 Center for Educational and Psychological Services. Introductory didactic and practice seminar in clinical interviewing.

## Counseling and Clinical Psychology

CCPX 5542. Introduction to contemporary psychoanalytic thought (2-3)
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 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 life tasks 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 life span, altruism and mental health, coping with the aftermath of genocide, terror, and aggression in the schools.

## 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 6360Z, or CCPJ 6364. For practicum students in the Center for Educational and Psychological Services. 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. Supervision practicum in clinical supervision services (1-3)
Faculty. 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 doctoral students in clinical psychology, two semesters, $3-4$ points each semester. Supervised practice in psychotherapy as staff members of the Center for Psychological Services.

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. 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)
Faculty. 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)

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 (0-1 each semester)
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: equal to 3 points at current tuition rate of each term.


## COUNSELING PSYCHOLOGY

Program Coordinator and
Director of Training:
Professor Marie L. Miville
Program Office: (212) 678-3397
Web site: www.tc.edu/ccp/CounPsych

## Counseling Psychology

(Code: TJV)

## Degrees Offered:

Doctor of Education (Ed.D.)*
Doctor of Philosophy (Ph.D.)
*We are currently not accepting applications for this degree level.

## Program Description:

The Program in Counseling Psychology is dedicated to the preparation of counseling psychologists 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 Doctoral Student Handbook for more information.)

The objectives of the program are to prepare students to:

1) Be self-aware, reflective, and sensitive to social constructions, to 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;
2) Focus on the development of individuals and groups, their educations and careers, assets and strengths, the importance of person-environment interactions, psychoeducation and preventive needs, as well as their pathologies;
3) Integrate theory, practice, and research;
4) 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 education (e.g., schools, colleges, and universities, etc.), health (e.g., outpatient clinics, hospitals, nursing homes, etc.) and related agencies. Graduates will be able to apply their skills
in school counseling, clinical practice, administration, assessment, and research as well as to produce knowledge, to be leaders in relation to policy development and implementation, and to work in independent practice.

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 that 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 short-term 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 evaluate the outcomes 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 doctoral program's training objectives.

Applicants for the doctoral program are considered for fall admission only. 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.

## 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 are also 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 Bachelor of Arts degree with 60 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.

## COUNSELING AND Clinical Psychology

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. Additional information may be found in the Doctoral Student Handbook. 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, 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 can be considered. 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: (1) pass an interdepartmental and college wide examination on research methods and design, (2) submit a scholarly review of research on a psychological topic of particular interest to them, and (3) pass a program certification comprehensive exam. In addition, they must satisfy all other requirements for certification prescribed by the Office of Doctoral Studies (see the bulletins issued by that office). Students who fail to take the certification examination at the appropriate point in their studies are subject to certain penalties. To avoid these penalties, the certification examination must be taken no later than the third year in the program. (See Doctoral Student Handbook for more information).

## The Program Certification

and Comprehensive Exam
The Certification and Comprehensive Exam will have two components: (a) a scholarly paper involving a comprehensive and integrative review of the literature in a topic chosen by the student in consultation with his or her advisor, and (b) a written exam covering several areas in counseling psychology. Cultural issues will be infused in the content questions on the exam. Also, there are progress evaluations done annually to facilitate students timely completion of the Ph.D. degree (See Doctoral Student Handbook for more information).

## Externship

This year-long placement in a field-setting for clinical experience is required for doctoral students. Students petition to be placed into a supervised two-days-a-week training site and see individual and group clients. For students to be eligible for externship they need to have completed at least two years of coursework and at least one and a half years of practicum.

## 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 second year 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 non-majors as well as majors. Many 5000 -level courses are also 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 4061. Principles and practices

 of vocational rehabilitation (3)History and legislation, principles, settings, major issues. The counselor's role in the rehabilitation program.

## CCPJ 4062. Medical aspects of

 disabilities and rehabilitation (2-3) Limiting aspects of the major physical and emotional disabilities. Understanding and using medical knowledge in rehabilitation counseling.CCPJ 4064. Theories of counseling (3)
Approaches to counseling; theories and research findings; educational, vocational, and personal counseling; typical problems; illustrative cases.

## CCPJ 4065. Career development

of women (2-3)
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 4068. Counseling women (2-3) 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) 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. Community agencies

 and resources (2-3)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 (1) Current and emerging emphases in theory, research, and practice. Registration not limited to one term. Topics are announced in the preliminary and final course schedules distributed each semester.

CCPJ 4560. Professional and ethical issues in psychological counseling (3) Professional orientation for Ed.M. students in psychological counseling. Ethics and professional issues; employment opportunities and work settings. Registration in the first year is recommended. (masters only)

## CCPJ 4873. The Winter Roundtable

 on cultural psychology and education (1) 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)
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) 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 (3)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.

CCPJ 5061. Assessment in counseling psychology (1-3)
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, Section 2.

CCPJ 5062. Career counseling and development (3)
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 sociopolitical phenomena. Materials fee: $\$ 40$.

CCPJ 5063. Psychological and cultural aspects of disability and rehabilitation (2-3) 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)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, children, couples and families are studied. Illustrative cases are presented and discussed.

CCPJ 5065. Psychology of the undergraduate: Issues for counseling and psychology (3) Theory and research on the psychological development of women and men in college. 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)
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 ( $2-3$ )
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)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)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 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 Other Departments Taught by Counseling Faculty

## HUDK 5122. Psychological factors in

later life (3)
See the Department of Human Development for course description.

ITSF 5023. School counseling for the bilingual/bicultural child and family (3)
See the Department of International and Transcultural Studies for course description.

## Fieldwork and Internships

CCPJ 5260. Fieldwork in psychological counseling and rehabilitation (2-4)
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 autumn 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) 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 autumn 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) 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 autumn 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 (2-4) 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)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)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 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 Center for Psychological Services. Special fee: $\$ 115$.
*CCPJ 5364. Advanced practicum in multicultural counseling and psychotherapy (2) Concurrent registration for CCPX 5630. 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, 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)
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) 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: $\$ 20$.

CCPJ 6330. Basic practicum in individual counseling and psychotherapy (4)
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)Year-long placement in a field-setting for clinical experience. (Required for Doctoral students) Students petition to be placed into a supervised 2 -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 course work. For students to be eligible for externship they need to
have completed at least two years of coursework and at least one and a half years of practicum. Externships involve students applying to affiliated programs (i.e., institutions and organizations with which we have established affiliated agreements with). 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 student be trained in individual and group modes of service delivery.
*CCPJ 6360. Practice in psychological counseling (4 points each for autumn and spring)
Required: permission of the instructor, and concurrent registration for CCPX 5630. For advanced doctoral candidates in counseling psychology. Course is a year long seminar for second year doctoral students. It involves a weekly seminar, client assignments with individual supervision, and exposure to a range of theoretical approaches to the clinical/counseling interview. Students will engage in shortterm counseling of persons with personal, social, and educational problems in the Center for Psychological Services. Students register for 4 points each term.

CCPJ 6362. Group practicum (3)
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)
Permission required. Prerequisites: CCPJ 5025. (Year Course) Advanced group supervision to provide service to clients in the Center for Psychological Services and/or outside agencies.

CCPJ 6368. Advanced supervision and teaching of counseling (0-2)
Permission required. Supervision and related teaching activities for advanced doctoral students under the guidance of a faculty member. Registration not limited to one term.

* Students must register for these courses in the summer for year long commitments.


## Seminars

CCPJ 5560. Review of research in counseling psychology (3)
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)
New and emerging developments, practices, and concerns in the field are examined and evaluated. Topics are announced in the schedule of classes, that is distributed each semester. Registration not limited to one term.

CCPJ 6560. Advanced professional issues (0-1)
Students will familiarize themselves with a range of professional issues that affect their learning and development as Counseling Psychologists as well as having 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)
Ethics and standards of psychological practice and research. Limited to doctoral students in psychology. Others by special permission.

CCPJ 6572-CCPJ 6579. Research practicum in counseling psychology
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 6572. Multicultural competencies (1-3) Professor Sue.
- CCPJ 6573. Cross cultural research (2-3) Professor Yeh.
- 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 (2-3) Professor Hage.
- CCPJ 6577. Psychological interventions with older persons (2-3) Dr. Kramer.
- CCPJ 6578. Research practicum psychology undergrad minor (2-3) Professor Constantine.
- CCPJ 6579. Research practicum identity and intimacy (2-3) Professor Gushue.

CCPJ 7502. Dissertation seminar (1-3) 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)
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: equal to 3 points at current tuition rate of each term.

## PSYCHOLOGICAL COUNSELING

Program Coordinator:
Professor Marie L. Miville
Program Office: (212) 678-3397
Web site: www.tc.edu/ccp/CounPsych
Psychological Counseling
(Code: TJE)

## Degree Offered:

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 life span. 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;
2) 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.

# Counseling and Clinical Psychology 

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 short-term 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 evaluate the outcomes 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 considered 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 maybe found in the Master's Student Handbook.

School counseling is one of several areas of specialization within the Ed.M. program in Psychological Counseling. 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 Counseling 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. The application for certification is made upon graduation from the M.A. program.

Similarly, students can become certified as Rehabilitation Counselors by completing a series of specified courses, three to four years of post-master's work experience in an appropriate setting, and successful performance on an examination sponsored by the Commission on Rehabilitation Counselor Certification (CRCC). Consult the Master's Student

Handbook for more information about Rehabilitation counseling specialization.

In 2005, Teachers College received approval from New York State to offer a LicenseQualifying Mental Health Counseling Program. 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).

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 part-time 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 course work. 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:
Professor Elizabeth Midlarsky
Program Office: (212) 678-3267
Email: em142@columbia.edu
Web site: www.tc.edu/ccp/Clinical
Psychology in Education
(Code: TXA and TXG)

## Degree Offered:

Master of Arts (M.A.)
TWO TRACKS:
Personality and Psychopathology
(Code: TXA)
General Psychology (Code: TXG)

## Program Description:

The Personality and Psychopathology track aims to give students introductory training at the graduate level in personality and psychopathology, research methods in psychology, psychological perspectives on social contexts and social problems, and theories of psychotherapy. It includes clinical course work, and opportunities to gain experience in relevant fieldwork and research, both inside and outside the classroom. The General Track is designed to provide students with a broad exposure to clinical psychology and to other areas of psychology that may be of interest to them.

Graduates of these academic M.A. programs are not trained for the independent practice of counseling psychotherapy or psychological assessment. However, with a Master of Arts degree, graduates may find employment in research centers, social service agencies, 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 GRE's are recommended but not required.

Applications are considered for fall admission. 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 program for the Master of Arts (M.A.) degree in Psychology in Education: Personality and Psychopathology requires 32 points of coursework and a special project. The program is built around an 18 -point core of courses in the Clinical Psychology program (CCPX). Degree requirements may be completed on a full-time basis in an academic year (two semesters), a calendar year (two semesters plus one or two summer sessions), or its equivalent in part-time study.

The program for the Master of Arts (M.A.) degree in Psychology in Education: General Psychology requires 32 points, at least 18 of which must be taken in the Department of Counseling and Clinical Psychology (CCPX or CCPJ). A special project is also required. This program may be completed in an academic year (two semesters), a calendar year (two semesters plus summer), part-time study, which varies with the number of points in which the students enrolls each semester.

In addition to the courses taken within the Department of Counseling and Clinical Psychology, all M.A. students must take at least three Teachers College courses outside the department. Each of these courses should be taken for 2 or 3 points.

Transfer credits from courses taken elsewhere are not accepted toward any M.A. programs at Teachers College. All courses must be taken at Teachers College or Columbia University through Teachers College Registration.

All students matriculating in the M.A.
Program are given a copy of the Student Handbook. The Handbook outlines all program requirements including curriculum and guidelines for the special project. The basic curriculum includes:

## The Curriculum:

General Psychology Track

## I. Required Courses (18 points total):

- Students may take any master's level (typically 4000 and 5000 level) courses in the Department of Counseling and Clinical Psychology.
- 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 master's students.


## II. Electives (14 points total):

* To satisfy the college breadth requirement, students must complete at least three
Teachers College courses (a course for this purpose is one in which a minimum of 2 points is earned) outside the Department of Counseling and Clinical Psychology. The remaining points may be taken as electives either in or outside of the department.


## The Curriculum: <br> Personality and Psychopathology

## I. Required Courses <br> Psychology in Education <br> (18 points total):

A. Adult Psychology

- CCPX 5032 Adult psychopathology(3)
B. Developmental Psychology
- CCPX 5040 Development and
psychopathology:
Atypical context (3)
or
- CCPX $5034 \quad$ Child psychopathology (3)
C. Psychotherapeutic Approaches/ Psychological Intervention
- CCPX 5045 Psychotherapy, religious diversity, and spirituality (3) Spring
or
- CCPX $5532 \quad$ Children of diverse
backgrounds (3)
D. Social Psychology

| - CCPX 4010 | Psychological perspec |
| :---: | :---: |
|  | on critical social issues (3) |
|  | Fall |
|  | or |
| - CCPX 4060 | The psychology of loss and trauma (3) |
| E. Basic Processes in Applied Psychology |  |
| - CCPX 4000 | Introduction to applied psychology (3) |
|  | or |
| - CCPX 4030 | Psychology of adjustment (3) or |
| - CCPX 4126 | Mother-child matrix (3) |
|  | or |
| - CCPX 5546 | Research perspectives on critical social problems (3) |

F. One of the following

| - CCPX 4120 | Psychotherapy through <br> film and fiction (3) |
| :--- | :--- |
| - CCPX 4125 | or <br> Women and mental health (3) <br> or |
| - CCPX 4150 | Introduction to forensic <br> psychology (3) <br> or |

- CCPX 4230
- CCPX 5102
- CCOX 4038

Fieldwork in clinical
psychology (3)
or
Research and clinical applications of DSM-IV (3) (3)
II. Breadth requirement
A. Research Methods

- HUD 4120

Method of empirical research
or research
B. Statistics

- HUDM 4120

Basic concepts in statistics or

- HUDM 4122

Probability and statistical inference or

- HUDM 5122 Applied regression analysis
C. An additional course outside of the Department of Counseling (CCPJ) and Clinical (CCPX) Psychology.
The following are suggested:
- HUDM 4050
- HUDK 4020

Introduction to measurement
Theories of human development

- HUDK 4030 Cognitive clinical
interviewing
- HUDK 5022 Emotional development
- HBSK 5033 Human clinical neuro-
- HBSS $4110 \quad \begin{aligned} & \text { psychology } \\ & \text { Health promotion for children }\end{aligned}$ and adolescents Human sexuality education Health promotion for aging adults
- HBSS $4123 \quad$ Violence and its prevention
- HBSS 4130 Alcohol and health


## III. Electives

The remaining points may be taken in electives, either in or outside of the department. The degree requirements for both tracks within the M.A. program may be completed on a full time basis in an academic year or calendar year, although students may elect to meet the requirements over a longer period of time.

Be sure to consult with the Program Coordinator about course selection, and about the special project.

## CCPX COURSES:

Please refer to course descriptions listed under Clinical Psychology.


# Curriculum and Teaching 

PROGRAMS:
CURRICULUM AND TEACHING 81
EARLY CHILDHOOD PROGRAMS 83
Early Childhood Education
Early Childhood Special Education
INCLUSIVE
ELEMENTARY/CHILDHOOD
EDUCATION

INCLUSIVE

ELEMENTARY/CHILDHOOD

EDUCATION AND TEACHING

STUDENTS WITH DIS/ABILITIES
GIFTED EDUCATION
LITERACY SPECIALIST


## 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 or secondary education
—students with dis/Abilities:
elementary
-disability studies in education (agency and school-based)
—gifted education
—literacy
- Director of:
-child-care center
-community or government-based organization or agency
—infant and parent center
—early childhood program
- 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 dis/Abilities
—gifted education
-curriculum development
-curriculum studies
-literacy education
—educational leadership and school change
—urban and multicultural education
- Administrator (such as assistant superintendent, consultant, coordinator, director) in charge of:
-curriculum and instruction
-curriculum research
_professional development -gifted education
- 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)
Sharon Lynn Kagan
(Early Childhood Education)
Nancy Lesko (Curriculum and Teaching)
Frances Schoonmaker
(Curriculum and Teaching)
Leslie R. Williams
(Early Childhood Education)
Karen Zumwalt (Curriculum and Teaching)

## ADJUNCT PROFESSORS:

Lyn Corno (Curriculum and Teaching)
Beatrice Fennimore
(Early Childhood Education)

## ASSOCIATE PROFESSORS:

A. Lin Goodwin
(Inclusive Education, Teacher Education)
Thomas Hatch (Curriculum and Teaching)
Michelle Knight (Curriculum and Teaching)
Celia Oyler (Inclusive Education,
Teacher Education)
Susan L. Recchia
(Early Childhood Special Education)
Marjorie Siegel
(Curriculum and Teaching, Literacy Education)

ADJUNCT ASSOCIATE PROFESSOR
Lisa Wright (Gifted Education)

## ASSISTANT PROFESSORS:

Lynne M. Bejoian (Inclusive Education) Alicia Broderick (Inclusive Education) Britt Hamre (Inclusive Education) Stephanie Jones (Curriculum and Teaching, Literacy Education)
Bonnie Keilty (Early Childhood
Special Education)

## ADJUNCT ASSISTANT PROFESSORS:

Marcella Bullmaster-Day
(Curriculum and Teaching)
Janet Andron Hoffman
(Early Childhood Education)
Elaine Kanas (Curriculum and Teaching)
Richard Keller
(Teaching students with dis/Abilities )
Tracy Lederman (Curriculum and Teaching)
Diane Newman
(Teaching students with dis/Abilities)
Richard Wiener (Curriculum and Teaching)

## LECTURERS:

Anne Sabatini (Curriculum and Teaching)
Nancy Sall (Early Childhood Special Education)

## INSTRUCTORS:

Troy Akiyama (Inclusive Education)
Susan Baglieri
(Teaching students with dis/Abilities)
Kathleen Brody (Literacy Education)
Dawn Horton (Gifted Education)
Janice Knopf
(Teaching students with dis/Abilities)
Kristin May-Galvin
(Early Childhood Special Education) Heeral Mehta
(Teaching students with dis/Abilities)
Neelam Patel (Inclusive Education)
Victoria Puig
(Early Childhood Special Education)
Mary Rowe
(Teaching students with dis/Abilities) Lindsey Russo (Early Childhood 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: Preservice (Initial Certification Programs) and In-service (Professional Certification Programs).

Preservice, or initial certification, M.A. and Ed.M. programs are designed for people with little or no teaching experience or preparation who wish to become teachers. Programs in this department lead to certification in the following areas: Early Childhood Education, Early Childhood Special Education, Dual Certification in Early Childhood Education and Early Childhood Special Education, Early Childhood Education with an Extension in Gifted Education, Elementary/Childhood Education, Elementary /Childhood Education with an Extension in Gifted Education, and Dual Certification in Childhood Education and Teaching Students with dis/Abilities.

In-service, or professional certification, M.A. programs are designed for individuals who are already certified or are initially certified to teach in New York, in another state, or on another grade level and who seek a Master of Arts degree in Curriculum and Teaching (Elementary or Secondary), Gifted Education, Literacy Specialist, or Teacher of Students with dis/Abilities. Graduates of these programs meet the formal educational requirements for professional (formerly "permanent") certification in the State of New York. The program in Gifted Education leads to a certificate extension.

## CURRICUlUM And TEACHING

## Master of Education

The Master of Education degree (Ed.M.) within the Department of Curriculum and Teaching affords students the opportunity to develop an area of expertise beyond that required for classroom teaching. The degree comprises 60 points. 30 of those 60 points may be transferred from previous graduate work at another institution or at Teachers College, upon the recommendation of the student's program advisor. Students who pursue the Ed.M. in Curriculum and Teaching focusing on the preparation of educational leaders may only transfer 20 points. See specific programs for additional admission requirements.

## 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
- Dis/Ability Studies in Education
- Literacy Education
- Religious Education
- Urban and Multicultural Education

Doctoral students in all concentrations may also take coursework to prepare them 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 and the spring semesters of his or her first year. C\&T 5000 is a 6 -point course that meets for a double class session once per week, resulting in a minimum first-year enrollment of 9 points. 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. A first-year student is defined as a student who matriculates in the fall term or who matriculated in the previous spring or summer term and is enrolling for his or her first fall term.

This 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 doctor-al-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 (In-service) 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 Preservice 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. With the exception of the Ed.M. in Childhood Education, 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. programs in the Department of Curriculum and Teaching with
the exception of the Ed.M. in Childhood Education.

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 | $\begin{aligned} & \text { Program } \\ & \text { Code } \end{aligned}$ | Degree | Certification Area | Prerequisites | Teaching Experience |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | TEI | M.A. -Extension within TYD (41 credits) and TYP (40 credits) | Birth-grade 2 or grade 1-6 plus gifted extension | Same as TYD and TYP | Refer to TYD and TYP below |
|  | $\begin{gathered} \text { TYD/TEC } \\ \text { /TYN } \end{gathered}$ | 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 | Undergraduate liberal arts requirements | Previous experience with young children preferred but not required |
|  | TYF | M.A. (52 Credits)* <br> Pending approval by New York State <br> Education Department | Inclusive Elementary 1-6 \& Teaching Students with dis/Abilities | - B.A. 3.0 Undergrad GPA <br> - All or most NYS required liberal arts courses completed <br> - Commitment to urban, public schools and diverse learners | None |
|  | TYP | M.A. (40 credits)** | Elementary 1-6 | - 3.0 Undergrad GPA <br> - All or most NYS required liberal arts courses completed <br> - Commitment to urban, public schools and diverse learners | Teaching experience not required, <br> Prior experience with children/learners a plus |
|  | TEI | M.A. extension program (in-service) (32 credits) | Gifted Extension | Initial Certification* | Preferred but not required |
|  | TYZ | M.A. (32 credits) | Elementary | 3.0 Undergrad GPA Initial Certification* Elementary | Preferred but not required |
|  | TYZ | M.A. (32 credits) | Secondary English, Math, Science, Social Studies | 3.0 Undergrad GPA Initial Certification* in one of the listed areas | Preferred but not required |
|  | TYZL | M.A. <br> (Literacy Specialist) (32 credits) | Literacy Specialist (birth-grade 6) | 3.0 Undergrad GPA Initial Certification* (any teaching credential) | Preferred but not required |

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## CURRICULUM <br> AND TEACHING

Program Coordinator:
Professor Nancy Lesko

| Program Office: $\quad$ (212) 678-3264 <br> Email: <br> lesko@tc.edu |
| :--- |
| Web site: www.tc.edu/c\&t/Curric\&Teach |
| Curriculum and Teaching <br> (Code: TYZ) |

## Degrees Offered:

Master of Arts (M.A.)
(In-service, or with professional
New York State certification)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

## Program Description:

The Program in Curriculum and Teaching is designed for experienced in-service 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/Childhood Education. Individuals working in areas related to education but who are not seeking teacher certification may engage in the professional study of Curriculum and Teaching. Admission to degree study will depend on faculty assessment and approval of prior participation in education-related activities (other than classroom teaching) or work in educational institutions.

## Special Application

## Requirements/Information:

Refer to Departmental Special Application Requirements/Information section at the beginning of this department section.

## Degree Requirements:

All the Master of Arts programs include field experience or practica.

## Master Degrees in Curriculum and Teaching (TYZ)

## Elementary Professional

## Certification Program

The program supports three shared philosophical stances (inquiry, curriculum, and socialjustice) underlying the long standing tradition of preparing educational leaders. With careful planning and advising, this program can be completed in 12 months starting in 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 \& 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\&T 4130 Critical perspectives in elementary education (3)
- C\&T $4502 \quad$ Master's project (1)

Social Context Selective Courses—Diversity (2-3 points)
Students choose one Selective from the following:

- C\&T 4000 dis/Ability in contexts
- C\&T 4078 Curriculum and teaching in urban areas
- C\&T 4114 Multicultural approaches to teaching young children
- C\&T 5037 Literacy, culture, and the teaching of reading (Prerequisite: C\&T 4138 or a course in teaching reading)
- C\&T 4046 Multifoundational approaches to learning dis/Ability

Social Context Selective Courses-General (2-3 points)
Students choose one Selective from the following:

- C\&T 4004

School change

- C\&T 4023 Differentiated curriculum for gifted students
- C\&T 4032 Gender, difference, and curriculum
- C\&T 4161 The teacher
- C\&T 4615 Young children and social policy
- C\&T 4121 Early childhood teaching strategies within a social context

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 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:
$\left.\begin{array}{ll}\text { - C\&T 4002 } & \begin{array}{l}\text { Curriculum theory } \\ \text { and history (3) }\end{array} \\ \text { - C\&T 4005 } & \begin{array}{l}\text { Principles of teaching } \\ \text { and learning (4) } \\ \text { (includes practicum in }\end{array} \\ \text { your own classrooms } \\ \text { or in a PDS school) }\end{array}\right\}$

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 \& Technology
4. English

Social Context Required Courses (4 pointsOnly offered in the fall semester and must be taken concurrently)

- C\&T $4145 \quad$ Critical perspectives in
secondary education (3)
aster's project (l)
Social Context Selective Courses-Diversity (2-3 points)
Students choose one Selective course from the following:
- C\&T 4000 dis/Ability in contexts
- C\&T 4001 Differentiated instruction
- C\&T $4078 \quad$ Curriculum and teaching
- C\&T 5037 Literacy, culture, and the teaching of reading
- C\&T 4046 Multifoundational approaches to learning dis/Ability

Social Context Selective Courses-General (2-3 points)
Students choose one Selective course from the following:

- C\&T 4004 School change
- C\&T 4023 Differentiated curriculum
for gifted students
- C\&T 4032 Gender, difference,
- C\&T 4161 The teacher

Elective Courses ( $0-2$ 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

There are two separate programs of study that lead to the Ed.M. in Curriculum and Teaching. The first option allows the student to design a program that is tailored to her/his professional goals. The second option is designed for students who are preparing to be educational leaders. The program of study for the individualized Ed.M. includes:
Core Courses:

- C\&T 4002

> Curriculum theory and history (3)

- C\&T 4004 School change (3)
- C\&T 4005 Principles of teaching and learning (3)
- Practical Curriculum Design Course (at least one of the following): C\&T 4052 Designing curriculum and instruction (2-3), C\&T 4023 Differentiated curriculum for the gifted-talented (2-3), C\&T 5114
Development of multicultural curriculum for the early years (3), or MSTU 4083 Instructional design of education technology (3).
- One course in social-historical foundations of curriculum and teaching. Choose from: C\&T 5036 Child and family policy (2-3), or C\&T 5074 Curriculum and teaching policy (3).
- Beyond the core courses, students' programs are individually planned with their advisors, based on their professional goals and interests.

The program of study for the educational leadership Ed.M. is as follows:

- Leading Instruction (24 points): C\&T 4000 dis/Ability in contexts, C\&T 4052 Designing curriculum and instruction, C\&T 4004 School change, one course in curriculum policy, (C\&T 4113 Early childhood methods and programs, C\&T 4114 Multicultural approaches to teaching young children, C\&T 4001 Teaching students with dis/Abilities in inclusive classrooms, or C\&T 4023 Differentiated instruction for gifted students).
- Leading learning (12 points): C\&T 5053 Staff development processes and procedures, C\&T 4051 Supervision for elementary and secondary schools, ORLA 4030 Ethical issues in educational leadership and one course in adult learning.
- School and institutional management ( 9 points): one course in finance, law, and systems management. Apprenticeship (3 points): C\&T 6200 Field study in designing curriculum and instruction or C\&T 6400 Internship program in curriculum research.

Selective (3 points): one course on social-historical contexts

## Doctor of Education

The basic curriculum for Ed.D. students includes:
Core Courses:

- C\&T 5000
- C\&T 5502
- HUDM 4122

Theory and inquiry in curriculum and teaching (6 points each semester, fall and spring, of the first year) Qual/Research in curriculum and teaching (3) Probability and statistical inference (3)

One other research course appropriate to your program.

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 (1-3)
- C\&T 7501 Dissertation seminar in curriculum and teaching (1-3).

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
- Dis/Ability Studies in Education
- Literacy Education
- Religious Education
- Urban and Multicultural Education



## Early Childhood Programs

The Early Childhood Programs include the following: the Preservice Integrated Early Childhood/Early Childhood Special Education Program; Early Childhood Education; Early Childhood Special Education, and Early Childhood Policy.

## DUAL CERTIFICATION/ EARLY CHILDHOOD EDUCATION/ EARLY CHILDHOOD EDUCATION SPECIAL EDUCATION

Program Coordinators:
Professor Celia Genishi and
Professor Susan Recchia
Program Office: (212) 678-3860

## Program Description:

## Master of Arts

Initial certification programs (codes: TYD,
TEC, TYN): Preservice Integrated Early Childhood, Early Childhood Special Education, and Dual Certification: Early Childhood Education, Early Childhood Education Special Education.

Students with backgrounds in elementary education or with no previous course work 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 for the M.A. in Early Childhood Education (TYD) leads to initial certification in Early Childhood Education (birth-8 years).

The course of study for the M.A. in Early Childhood Special Education (TEC) leads to initial certification as a Teacher of Students with Disabilities, Early Childhood (birth8 years).

Dual Certification: Early Childhood Education/ Early Childhood Special Education (TYN).
The course of study in Integrated Early Childhood/Special Education leads to initial certification as both an Early Childhood Education teacher and a Teacher of Students with Dis/Abilities 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 three 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 (TEC) 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 (Tyd)
Course requirements for M.A. students seeking initial certification as early childhood teachers (birth-8 years):

Core Courses

- C\&T 4080

Risk and resilience in early development: Birth-8 years (2-3)

- C\&T 4112 Integrated curriculum
in early childhood (6)
- C\&T 4308 Field experiences in early childhood/special education (2)
-C\&T 4708 Observation and student teaching in early childhood/special education (two terms) (6)

Methods Courses

- A\&HM 4022

Artistic lives of 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)
- A\&HM 4022 Artistic lives of children (2)

Foundation Courses

- A\&HH 4070 History of education in the U.S. (or equivalent) (2)
- C\&T 4001 Differentiated instruction
- C\&T 4114 in inclusive classrooms (2) proaches to early childhood education (2-3)
- C\&T 4119 Interdisciplinary methods of working with families (2)
- C\&T 5118 Infant and toddler development and practice (3-4)
Culminating Project:
Students complete an integrated portfolio over the course of the program reflecting their personal growth as an early childhood teacher.


## Master of Arts (Tec)

Course requirements for M.A. students seeking initial certification as teachers of students with dis/Abilities in early childhood (birth-8 years):

Core Courses

- C\&T 4080
- C\&T 4112
- C\&T 4302 Supervised practicum in the assessment of young children with exceptionalities (3)
- C\&T 4308 Field experiences in early childhood/special education (2)
- C\&T 4708 Observation and student teaching in early childhood/special education (two terms) (6)
- C\&T 5118 Infant and toddler development and practice (3-4

Methods Courses

- A\&HM 4022 Artistic lives of 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)
- HBSK 4085 Behavior management in the classroom (or special ed elective) (2)

Foundation Courses

- HBSE 4001 Teaching students with dis/Abilities in inclusive classrooms (2)

Working with families of young children with dis/Abilities (2)

Culminating Project:
Students complete an integrated portfolio over the course of the program reflecting their personal growth as an early childhood teacher.

Dual Certification Program in Early Childhood/Early Childhood Special Education (Code: TYN)
Course requirements for M.A. students seeking initial dual certification as both early childhood teachers and teachers of students with dis/Abilities in early childhood (birth-8 years):

Core Courses

- C\&T 4080

Risk and resilience in early development: Birth-8 years (2-3)

- C\&T 4112 Integrated curriculum 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/special education (2)

- C\&T 4708 Observation and student teaching in early childhood/special education (two terms) (6)
- C\&T 5308 Advanced practicum in early childhood (or C\&T 5321) (2-3)
- C\&T 5118 Infant and toddler development and practice (3-4)
Methods Courses
- A\&HM 4022 Artistic lives of 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)

- HBSK 4085 Behavior management in the classroom (or special ed elective) (2)


## Foundation Courses

- A\&HH 4070 History of education in the U.S. (or equivalent) (2)
- C\&T 4001 Differentiated instruction in inclusive classrooms (2)
- C\&T 4083 Working with families of young children with dis/Abilities (or C\&T 4119) (2)
-C\&T 4114 Multicultural approaches to early childhood education (2-3)

Culminating Project:
Students complete an integrated portfolio over the course of the program reflecting their personal growth as an early childhood teacher.

Gifted Extension
Students can qualify for the extension in gifted education as well as certification for birth-grade 2 by enrolling in the 41-point early childhood education program with a gifted education extension.


## EARLY CHILDHOOD SPECIAL EDUCATION

Program Coordinator:
Professor Susan Recchia
Program Office: (212) 678-3873
Email: recchia@tc.edu
Web site: www.tc.edu/c\&t/ChildSpecEd
Early Childhood Special Education
(Code: TEC)

## Degrees Offered:

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.),
Ed.D. may be taken under Early Childhood Education (Code: TYD)

## Program Description

## Master of Education

Early Childhood Education
The 60 -point Master of Education (Ed.M.) program in Early Childhood Education focuses on leadership in early childhood settings. It offers students who have already completed the M.A (or the equivalent) an opportunity for more specialized and advanced study, training, and practice in the field.

## 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.

Early Childhood Special Education
The Master of Education (Ed.M.) program in Early Childhood Special Education offers students who have already completed the Master of Arts degree (or the equivalent) an opportunity for more specialized and advanced study, training, and practice in the field. Ed.M. students take a series of interdisciplinary courses focused on their individual areas of interest (e.g., infant development and practice, working with families, working in inclusive settings, curriculum development, etc.). Teaching and research practica are incorporated into the program.

## Doctor of Education

At the doctoral level, the specialization in Early Childhood Education prepares candidates for college teaching, research, policy, and

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 and Teachingother 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.

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.

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

## 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.

## Master of Education <br> (Early Childhood Education Specialization)

The basic curriculum for Ed.M. students includes:
Core Courses:

- C\&T 4002 Curriculum theory
and history (3)
- C\&T 4004 School change (3)
- C\&T 4005 Principles of teaching
- C\&T 5513 Seminar in early childhood
- C\&T $5514 \quad \begin{array}{ll}\text { education (3) } \\ \text { Seminar in early childhood }\end{array}$
education (3) or
- C\&T 5036 Child and family policy (2-3)
(See the Department web site for further information.)


## Electives:

Beyond the core courses, students' programs are individually planned with their advisors, based on their professional goals and interests.

## 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\&T 4005
Principles of teaching and learning (3)

- C\&T 4113 Early childhood methods and programs (3)
- C\&T 4121 Early childhood teaching strategies within a social context (3)
- C\&T 5513 Seminar in early childhood education (3), or
- C\&T 5514 Seminar in early childhood education (3)
- C\&T 6502 Studies in curriculum and teaching: Contemporary issues in early childhood social policy (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 (3)


## Electives:

Beyond the core courses, students' programs are individually planned with their advisors, based on their professional goals and interests.

Course requirements for Ed.M. students in Early Childhood Special Education may include:

- 30 points in Special Education and/or Early Childhood Education.
- 12 points in related social science courses (e.g., child development, speech and language development, neurophysiology, etc.),
- 10-12 points in research and technology, and $6-8$ points in practicum experience.
*Up to 30 points may be transferred in from other programs. The exact course of study is designed by students in collaboration with their program advisors.


## Doctor of Education <br> (Early Childhood 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 Seminar in early childhood education (3)
- C\&T 5514 Seminar in early childhood education (3)

Research Requirements:

- HUDM 4122 Probability and
-C\&T 5502
- C\&T $7500 \quad$ teaching (3) $\quad$ Dissertation seminar in curriculum and teaching (1-3)
- C\&T 7501 Dissertation seminar in curriculum and teaching (1-3)
- Plus one additional course in research methods (2-3)

Other courses are selected in consultation with an advisor. (See Department web site for further information.)

## Doctor of Education <br> (Early Childhood Education Policy Concentration)

The basic curriculum for Early Childhood Education Policy concentration includes:

90 credit hours. Of these, 12 are required as a part of the departmental core, 15 are required as a part of the research core, and 12 are required as a part of the early childhood policy concentration core, totaling 39 points. The remaining 51 points are selected in consultation with an advisor.

## 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 (1-3)
- C\&T 7501 Dissertation seminar (1-3)
- 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
- C\&T 6502 Studies in curriculum and teaching: Contemporary issues in early childhood social policy (3)
- HUDF 4000 Education and public policy (3)
- HUDF 5430 Internship (3)

Other courses are selected in consultation with an advisor.


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 May 15 prior to the fall term in which they plan to begin student teaching. A non-refundable deposit of $\$ 150.00$, which is later released into the student's account upon registration for student teaching that fall, is also required by May 15 . Some courses may be taken before beginning the professional sequence.

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 and TeachingNew York State and the Preservice Program require that degree/teacher certification candidates complete a distribution of liberal arts course work 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 course work 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 course-work taken prior to entering Teachers College;
2. Elective course work taken at Teachers College either as a part of or in addition to the 40 points required for the degree;
3. Graduate or undergraduate course-work 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 course-work in a second language, or in each of the liberal arts subjects.

Please note that for New York City licenses and 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 Department of Education of New York City and applicable State Education Departments for current licensing requirements.

Students can qualify for the extension in gifted education by enrolling in the 40 -point giftededucation extension program (see following pages).

## 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 Preservice Core, which includes such topics as teaching methods, teaching in urban and culturally diverse settings, curriculum development, multicultural education, alternative models of teaching, social
studies curriculum, and classroom management and organization (designated C\&T
4123, C\&T 4726, and C\&T 4124. Students complete the Preservice Core concurrently with the student teaching semesters. In addition to the Preservice 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 etc.
- C\&T 4143 Social studies elem, middle schools (1-2)
- Two courses in methods of teaching reading (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 (3): MSTC 4040 Science in childhood education and MSTC 4140 Laboratory methods and experiences for elementary school teachers
- C\&T 4000 dis/Abilitie in contexts (2 or 3)
- HBSS 4116 Health ed for teachers (1-3)
* 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 preservice faculty.
** Add in 12 points for special education certification.


## INCLUSIVE <br> ELEMENTARY/CHILDHOOD <br> EDUCATION AND <br> TEACHING STUDENTS <br> WITH DIS/ABILITIES <br> (DUAL-CERTIFICATE PRESERVICE PROGRAM)

Program Coordinator:
Professor Celia Oyler
$\begin{array}{ll}\text { Program Office: } & \text { (212) 678-3695 } \\ \text { Email: } & \text { Oyler@tc.edu }\end{array}$
Web site: www.tc.edu/c\&t/DualCertification
Elementary/Childhood Education and
Teaching Students with dis/Abilities
(Dual-Certificate Preservice Program)
(Code: TYF)
(Pending New York State approval)

## Degree Offered:

Master of Arts (M.A.)

## Program Description:

The dual certification program is designed for students who do not hold any teaching certification. This 51 -point M.A. program builds upon the 40 -point Inclusive Elementary Program. After completing the 40 point program, students enroll in a special one semester dis/Ability studies core that offers capstone courses toward the Teaching Students with Dis/Abilities 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 Inclusive Elementary Program.

The requirements for this program are the same for the Inclusive Elementary Program, with two exceptions: 1) instead of a literacy elective, students in the dual certification program are required to enroll in an assessment course: C\&T 4301, 2) no one-point elective is required. (Please note the requirements and deadlines for the Inclusive Elementary Program are the same for the dual certification program.)

## Listed below are the program course requirements: <br> Health Education for Teachers 1 <br> Science Methods 3 <br> Math Methods 3 <br> Foundations of Education 3 <br> Dis/Ability in Contexts 3

| Multicultural Social Studies |  |
| :--- | :--- |
| Methods | 3 |
| Student Teaching | 8 |
| Literacy Methods | 6 |
| Curriculum \& Instruction | 3 |
| Inclusive Curriculum |  |
| Development | 3 |
| Assessment (C\&T 4301) | 3 |
| Collaborative Communication |  |
| in Cultural Contexts | 3 |
| Access to Full Participation |  |
| in Schools | 3 |
| Practicum in Dis/Ability | 3 |
| Discourses in Dis/Ability | 3 |

Methods ..... 3
Student Teaching6
Curriculum \& Instruction ..... 3Development3
Assessment (C\&T 4301) ..... 3
in Cultural Contexts ..... 3
in Schools ..... 3
Discourses in Dis/Ability ..... 3

## GIFTED EDUCATION

Program Coordinator:
Professor James Borland
Program Office: (212) 678-3765
Email: borland@tc.edu
Web site: www.tc.edu/c\&t/GiftedEd

## Gifted Education <br> (Code: TEI)

## Degrees Offered:

Master of Arts (M.A.)
Doctor of Education (Ed.D.), available through Curriculum and Teaching (Code: TYZ)

## Program Description:

The M.A. program in gifted education is designed primarily for teachers, both preservice teachers (individuals who have no background in the field of education but wish to become teachers) and in-service teachers (those who already hold teaching certificates).

Preservice, or initial certification, students
 interested in gifted education should apply for admission to either the initial certification program in Early Childhood Education with the gifted education extension (for teaching students birth through grade 2) or the program in Elementary/Childhood Education with the gifted education extension (for teaching children grade 1 through grade 6). Students who complete these programs will be initially certified to teach on the early childhood or elementary level and will also earn the extension in gifted education. They will take coursework in gifted education and complete student teaching assignments in gifted education classrooms as well as meeting the requirements for the degree in Early Childhood Education or Elementary/Childhood Education.

The professional certification (in-service) M.A. program in gifted education is designed for students who have graduated from approved teacher-education programs and are initially certified, whether or not they have actual teaching experience. Completion of this program results in the award of the extension in gifted education from the State of New York and satisfies the requirements for professional certification in New York State.

The Ed.D. degree is a concentration within the general Curriculum and Teaching Ed.D. program. Students enrolled for this degree meet the departmental doctoral core requirements, complete coursework in gifted education, and undertake dissertation research on a problem related to gifted students.

## 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.

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. For information on application deadlines, see the Admissions section of this bulletin.

## Degree Requirements:

## Master of Arts

Preservice or Initial Certification ProgramMaster of Arts with Teaching Certification in Early Childhood Education and the Extension in Gifted Education (41 points).

## Required Courses in Gifted Education

 (11 points):- C\&T 4021

Nature and needs of gifted students (2)

- C\&T 4025 Educating the young gifted child (2)
- C\&T 4702 Observation and student teaching: Gifted (3)
- C\&T 5024 Planning and implementing programs for gifted students (3)
- C\&T 5810 New approaches to identifying and educating gifted students (1)

Other Required Courses (30 points):
Course in history or foundations of education (2)

- C\&T 4001 Teaching students with dis/Abilities in inclusive classrooms (2)
- C\&T 4080 Risk and resilience in early development (2)
- C\&T 4112 Integrated curriculum in
- C\&T4119 Interdisciplinary methods of Interdisciplinary methods of
working with families (2)
- C\&T 4131 Language and literacy in the
- C\&T 4132 early childhood curriculum (3)
- C\&T 4132 Learning and teaching in the primary reading/writing classroom (3)
-C\&T 4308
Field experience (1)
-C\&T4708
-C\&T4114
- HBSS 4116

Multicultural approaches to early childhood education (2)

- HUDK 4027 Health education for teachers (1)
mathematical thinking (3)

Special Project
Culminating project
Preservice or Initial Certification ProgramMaster of Arts with Teaching Certification in Childhood Education (40 points)


Required Courses in Gifted Education (12 points):

- C\&T 4021

Nature and needs of gifted students (2)

- C\&T 4023 Differentiated curriculum in the education of gifted students (2)
- C\&T 4702 Observation and student teaching: Gifted (3)
- C\&T 4822 Instructional models in the education of gifted students (1)
- C\&T 5024 Planning and implementing programs for gifted students (3)
- C\&T 5810 Differential instruction for all learners (1)

Other Required Courses (28 points):

- C\&T 4001 Teaching students with dis/Abilities in inclusive
- C\&T 4080 Risk and resilience in early development (2)
- C\&T 4123 Curriculum and instruction in elementary education (3)
- C\&T 4132 Learning and teaching in the primary reading/writing classroom (3)
- C\&T 4133 Learning and teaching in the intermediate reading/writing classroom (3)
-C\&T 4143 Social studies in the elementary and middle school (1)
- C\&T 4729 Student teaching (4)
- HUDK 4022 Developmental psychology: Childhood (2)
- HBSS 4116 Health education for teachers (1)
- MSTC 4040 Science in childhood education (2)
- MSTC 4140 Laboratory methods and experiences for elementary school teachers (1)
- MSTM 5010 Mathematics in the elementary school (3)
- Course in Foundations of Education chosen with advisor (2)

Special Project
Culminating project:
A culminating project, arranged in consultation with your advisor, that demonstrates your ability to integrate your theoretical knowledge with practical problems and issues in childhood education.

## Professional Certification (In-service) Program leading to the Extension in Gifted Education (32 points):

The Nature of Giftedness (4-9 points) Required Courses:

- C\&T $4021 \quad$ Nature and needs of gifted students (2-3)
- C\&T 5023 Exceptionality and intelligence: Theoretical approaches (2-3)

Elective Course:

- C\&T 4025 Educating young potentially gifted children (2-3)

Teaching Gifted Students (7-10 points)
Required Courses:
-C\&T 4023 Differentiated curriculum for gifted students (2-3)

- C\&T 4822 Instructional models in the education of gifted students (1-2)
- C\&T 5024 Planning and implementing programs for gifted students (3)
- C\&T 5810 Differential instruction for all learners (1)
- C\&T 6506 Advanced Seminar: Giftedness (2-3)

Out-Of-Program Requirements (10-15 points)
Additional courses to be determined in consultation with your advisor.
Field Placement (3 points)
-C\&T 4702 Observation and student teaching: Gifted (3) or
-C\&T 5302 Advanced practicum: Gifted (3)

Culminating Project:
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.

## 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 spring, of the first year)

Research Requirements:

- C\&T 7500 Dissertation seminar in curriculum and teaching (1-3)
- C\&T 7501 Dissertation seminar in curriculum and teaching (1-3)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122

Plus one additional course in research methods (2-3) Other courses are selected in consultation with an advisor.

Curriculum and Teaching Requirements:

- 9 points of course work in the Department of Curriculum and Teaching

Giftedness Requirements:

- 27 points of course work in courses in gifted education, including 9 to 12 points in C\&T 6506 Advanced seminar: Giftedness

Elective courses:

- 27 points of course work determined by the student and his or her advisor.


## LITERACY SPECIALIST

(BIRTH-GRADE 6)
Program Coordinator:
Professor Lucy Calkins
Program Office: (212) 678-3931
Email: calkins@tc.edu
Web site: www.tc.edu/c\&t/Literacy
Literacy Specialist
(Code: TYZL)

## Program Description:

The M.A. program as a literacy specialist is a 32 -point program that leads to New York State certification in Teaching Literacy. 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 full day 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 <br> 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 (19-20 points)

- C\&T 4138 Teaching literacy in the early years (3)
- C\&T 4200 Fieldwork in curriculum and teaching (1)
(co-requisite with C\&T 4138)
- C\&T 4139 Constructing critical readers (3)
- C\&T 4151 Teaching of writing (3)
- C\&T 4200 Fieldwork in curriculum and teaching (1) (co-requisite with C\&T 4139 and C\&T 4151)
- HBSK 4072 Theory and techniques of reading assessment and intervention (3)
- C\&T 4140 Literature for younger children (2-3)
- C\&T 5037 Literacy, culture, and the teaching of reading (3)

Master's Action Research Project:
Required of all students (1 point)

- C\&T 4502 Master's project (1)
(Literacy section)
(co-requisite with
C\&T 5037 or C\&T 4140)
Completion of Master's Action
Research Project
Out of Department Selectives: Required of all students (4-6 points)


## CURRICUlUM And TEACHING

To satisfy the college breadth requirement, students must complete 3 Teachers College courses. (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 Literacy and
- ITSF 4015 development (2-3)

Introduction to computers, language, and literacy (2-3)

- ITSF 4028 Teaching literacy in bilingual settings (3)
- MSTU 4049 Technologies and literacies (2-3)

Within Department Selectives: Required of all students (6-8 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 (3) |
| - C\&T 4842 | Institute: Content area <br> literacies (3) |

## COURSES:

C\&T 4000. Dis/Ability in contexts (2-3) Professor Bejoian. Enrollment limited to 35 students. 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 dis/Abilities. The course focuses on life contexts, including education, family (caregiver), employment, and independent living as well as life-span transitions. It draws on a wide range of interdisciplinary scholarship and ways of knowing.

C\&T 4001. Differentiating instruction in inclusive classrooms (2-3)
Professor Broderick and staff. Enrollment limited to 35 students. 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 or Schoonmaker. The nature and design of educational activities: theory, research, and practice of curriculum design.

C\&T 4004. School change (3)
Professor 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)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)
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 techniques, 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. Cross-listed with HUDF 4032.

C\&T 4046. A multifoundational approach to learning dis/Abilities (3)
Faculty. This course is open to both general and special education teachers and surveys a range of models and theories that continue to shape out understandings of learning dis/Abilities across life-span contexts and their social and legal ramifications, focusing most specifically on medical, cognitive/information processing, and sociocultural frameworks.

## C\&T 4047. Sociocultural and inquiry-based approaches to teaching students labeled as

 learning dis/Abled (2)Faculty. For majors only. 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 learning as growth into a discourse. Pre- or corequisite, C\&T 4046. Special fee $\$ 25$.

## C\&T 4051. Supervision for elementary

 and secondary schools (2-3)Professor Schoonmaker. 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)
Professor Lesko, Goodwin or Zumwalt. Application of models for designing curriculum and instruction. Students design curriculum in collaborative groups. Section 2 will focus on students designing social studies 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) Professors Recchia, Keilty, 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 dis/Abilities, and their families.

C\&T 4083. Working with families of young children with dis/Abilities (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 dis/Abilities.

C\&T 4112. Integrated curriculum in early childhood education (full-year course) (6) Professors Genishi, Recchia, and Williams. 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)
Professor Genishi, Williams and Dr. Fennimore. 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 (3)
Professor Williams. Analysis of major curriculum models for learning in young children through use of culturally and environmentallyderived 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)


C\&T 4123. Curriculum and instruction in elementary education (2-3)
Professors Goodwin, Hamre, Oyler, and staff. 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 education (2-3)
Professors Goodwin, Hamre, Oyler, and staff. Permission required. Continuation and extension of C\&T 4123, with an emphasis on curriculum theory, history, issues, standards, and the interrelationship of various instructional fields. Students work in teams to develop multi-grade/age curriculum in the social studies.

C\&T 4130. Critical perspectives in elementary education (2-3)
Professor Zumwalt or Faculty. Required for all professional certification M.A. students (elementary/middle school). 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) Professor Calkins, Jones, Siegel, or Dr. Stires. 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, Jones, Siegel, and Dr. Stires. 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 (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 (3)
Professors Calkins, Jones, and 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 (3) Professors Calkins, Jones, and Siegel.
Prerequisite: C\&T 4138. Examination of theory, research, and practice on teaching reading comprehension and critical analysis in intermediate grade classrooms. Consideration of curriculum design, assessment practices, and teaching methods and materials. 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)

Staff. Critical study of literary trends and materials for children in pre-kindergarten, 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)
Staff. 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 (1-2) Professors Goodwin, Hamre, Oyler, and staff. 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 (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 (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 4159. Teacher education programs (2-3) Faculty. Current developments in programs for the preparation and in-service development of teachers for elementary and secondary schools.

C\&T 4160. Supervision in preservice 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: P-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 course work 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. Prerequisite: C\&T 4004. Participation in educational assessment of referred children. Analysis of observational and standardized test data; formulation of educational enrichments, accommodations, and modifications. Conducted in the Center for Educational and Psychological Services or in appropriate community facilities. Course meets double sessions. Prerequisite: C\&T 4047. Lab fee: $\$ 150$.

C\&T 4302. Supervised practicum in the educational assessment of young children with exceptionalities (2-3)
Professor Recchia, Professor Keilty, and faculty. Permission required. Prerequisite: C\&T 4080. Participation in educational assessment of young children with exceptionalities. 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 (3) Professors Keilty or faculty. A practicum for students in the Early Childhood initial certification programs that serves as a prerequisite for student teaching. Field experiences will systematically include at least 100 hours of observation and practice across all EC age groups $-0-3$, pre$\mathrm{k}, \mathrm{K}, 1-2$. 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 4502. Master's project (1)
Professors Knight, Lesko, Schoonmaker, 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 course work 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 4705. Student teaching:

Learning dis/Abilities (4 points each semester, for two semesters) Faculty. School-based fieldwork and student teaching/practicum. Permission required. Course requires participation in community, school, and agency programs and a weekly seminar on campus. At least one semester is to be in inclusive education. $\$ 25$.

## C\&T 4708. Student teaching-infancy

 and early childhood (3)Faculty. Observation and student teaching. Permission required. This two-course sequence requires 3-5 days a week for participation 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)
Professors Goodwin, Hamre, Oyler, and staff. 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 May 15 prior to the fall term.

C\&T 4729. Professional laboratory experiences/student teaching (semesterlong) in elementary education (4-6) Professors Goodwin, Hamre, Oyler, and staff. 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 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. Students applying to student teach must file a Declaration of Intention to Student Teach by May 15 prior to the fall term.

C\&T 4731. Professional laboratory experiences (including student teaching) in elementary education (4)
Professor Goodwin. Permission required. Given in conjunction with C\&T 4123 or C\&T 4124. Laboratory experience designed for certified teachers if space is available. (See C\&T 4726 description). Students registering to begin student teaching must file a Declaration of Intention to Student Teach by May 15 prior to the fall term.

C\&T 4842. Institute: Content area literacies (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 (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. Cross-listed with HUDF 4899.

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 ( 3 points fall and 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. Exceptionality 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 Brooks-Gunn and 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 (3)
Professor Siegel and Jones. Prerequisite: C\&T 4138, C\&T 4139 or equivalent. 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 culturally-specific 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 (3)
Staff. Study of specific genres or curriculum issues in children's literature. Topics are announced in preliminary and final 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, in-service 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)Professor Sobol. 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 5112. Issues in child care and

 education: Infancy through school age (2-3) Dr. Farber. 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) Professor Williams. Exploration of dynamics of curriculum development for young children from 3 through 8 years of age. Participants will design a curriculum using principles of curricu-
## CURRICULUM And TEACHING

lum construction and a multicultural, inclusive philosophy. Prerequisite: C\&T 4114 or equivalent.

C\&T 5118. Infant and toddler development and practice (2-8)
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 1 or 2 semesters.

C\&T 5302. Advanced practicumgiftedness (1-6)
Professor Borland and Dr. Wright. Permission required. Guided experiences for advanced students in Giftedness. Supervised group field visits. Preservice internships arranged. Students submit reports analyzing experiences.

C\&T 5305. Advanced practicumlearning dis/Abilities (1-6)
Faculty. Permission required. Guided experiences for advanced students in learning dis/Abilities. Supervised group field visits. Preservice internships arranged. Students submit reports analyzing experiences.

C\&T 5308. Advanced practicuminfancy and early childhood (1-6) Professor Recchia and faculty. Permission required. Guided experiences for advanced students in Early Childhood/Special Education. Preservice internships arranged. Students submit reports analyzing experiences.

C\&T 5321. Practicum in early childhood education: Curriculum development, observation, and assessment in early childhood (3-4)
Professor Genishi and Williams. Permission required. Supervised in-service competencybased 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 qualitative research, with focus on case studies in classrooms and schools.

C\&T 5513-C\&T 5514. Seminar in early childhood education (3)
Professor Genishi, Recchia, and Williams.
Required of all second-year doctoral students in early childhood education and early child-
hood 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 studygiftedness (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 learning dis/Abilities and disability studies in education (2-4) Professor Reid and Broderick. Permission required. Students work in small groups under guidance on practical problems related to teacher-as-scholar practitioner, teacher-asclassroom 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. 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 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 (2-4)Faculty. Permission required. Firsthand experience in a center where curriculum research is in progress.

C\&T 6405. Advanced internshiplearning dis/Abilities (1-6)
Professor Reid. Permission required. Postmaster's level. Intensive in-service internship designed to meet individual student's needs. Students submit reports analyzing experiences.

C\&T 6408. Advanced internshipinfancy and early childhood (1-6) Professor Kagan and Recchia. Permission required. Post-master's level. Intensive inservice 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)
Professor Schoonmaker and staff. 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. In-service (2-4)
- C\&T 6453. Preservice (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 (2) 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 6505. Spencer Seminar (3)
Faculty. This seminar is designed to prepare doctoral students to conduct collaborative school-based inquiry focused on educational practice in elementary, middle, and high schools or early childhood settings. Special attention is given to issues of school-university collaboration, context-sensitive research methodologies, urban educational improvement, and the relation of research to development in school settings. Participation in field research and development is required.

C\&T 6506. Advanced seminargiftedness (3)
Professor Borland. For doctoral students in Giftedness. Recent developments in theory and research in gifted education.

C\&T 6507. Advanced seminarlearning dis/Abilities (3)
Professor Broderick. For doctoral students in learning dis/Abilities and related fields. Recent developments in theory and research as related to learning dis/Abilities from psychological, educational, sociological, and other sources.

C\&T 6508. Advanced seminar-
infancy and early childhood (3)
Professor Recchia. 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.

C\&T 6532. Seminar in reading/language arts and related research (3)
Professors Siegel and Jones. Permission required. Open only to advanced Master's and doctoral students with a specialization in reading or related area who have completed a recent methods course in reading. In-depth study and discussion of trends and issues in reading development and instruction.

C\&T 6533. Advanced study of children's literature (3)
Staff. 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) Professor Schoonmaker. 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 (1-4)
Faculty. Permission required.
C\&T 6914-C\&T 6915. Advanced studies in early childhood and childhood education (1-4)
Professors Genishi, Kagan, Recchia, and Williams. 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-C\&T 7501. Dissertation

 seminar in curriculum and teaching (1-3) Professors Genishi 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 plans for approval.C\&T 8900. Dissertation advisement in curriculum and teaching (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. degree.

## Continuing Education

C\&T 4802. Models of curriculum and teaching (non-credit or 1) Professor Goodwin, Genishi, or Williams. 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 1-3)
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 4853. Multisensory teaching of basic language skills for students with learning disabilities (non-credit or 3 )
Ms. Rowe. Introduction to the theoretical and practical issues of teaching a multisensory instructional language approach in reading, spelling, and handwriting, and in the structure of English, based on alphabetic phonics to dyslexic students. Offered in fall and summer terms. Materials fee: $\$ 30$.

C\&T 4854. Multisensory teaching of basic skills I (non-credit or 1)
Ms. Rowe. Prerequisite: C\&T 4853. Two daylong workshops combined with the teaching of alphabetic phonics curriculum in school settings. Extension of practice in schedule II, teaching reading, spelling, and handwriting.

C\&T 4855. Multisensory teaching of basic skills II (non-credit or 1)
Ms. Rowe. Prerequisite: C\&T 4854. Two daylong workshops combined with the teaching of alphabetic phonics curriculum in school settings. Extension of C\&T 4854.

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 5800. Institute: Teaching of writing

 (non-credit or 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 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 school teachers.

C\&T 5810. Different instruction for all learners (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 participant's 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 two credits will attend additional seminars to be scheduled during the class.

C\&T 5853. Advanced multisensory teaching of basic language skills for students with learning disabilities (non-credit or 2) Ms. Rowe. Prerequisites: C\&T 4853, C\&T 4854, and C\&T 4855. In-depth extension of multisensory techniques for teaching reading strategies, spelling situations and formulas, advanced syllable division, lesson planning, dictionary skills, composition, and comprehension. Two-week summer session.

C\&T 5854. Advanced multisensory teaching of basic skills I (non-credit or 1) Two day-long workshops to extend and refine skills in advanced phases of curriculum while teaching in school settings.

C\&T 5855. Advanced multisensory teaching of basic skills II (non-credit or 2) A continuation of C\&T 5854. Four day-long workshops.

# Human Development 

## PROGRAMS:

## COGNITIVE STUDIES

IN EDUCATION
Applied Educational Psychology:
Cognitive, Behavioral and
Developmental Analysis
Cognitive Studies in Education

## DEVELOPMENTAL

PSYCHOLOGY
Psychology-Developmental (M.A.)
Developmental Psychology (Ph.D.)

## MEASUREMENT, EVALUATION, AND

STATISTICS
Applied Statistics
Measurement and Evaluation
SOCIOLOGY AND EDUCATION


## DEPARTMENTAL MISSION:

The Department of Human Development is devoted to promoting an understanding of human development in families, schools, and social institutions across the life span. The Department provides social scientists and educators with theories, empirical methods, and analytic tools for understanding and conducting research in human development and cognition, and for helping solve educational and social problems.

## FACULTY:

## PROFESSORS:

John B. Black
(Cognitive Studies in Education/
Instructional Technology and Media)
Jeanne Brooks-Gunn
(Developmental Psychology)
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
(Sociology and Education)
Aaron M. Pallas
(Sociology and Education)
Barbara G. Tversky
(Cognitive Studies in Education)
Amy Stuart Wells
(Sociology and Education)
Joanna P. Williams
(Cognitive Studies in Education)

## ADJUNCT PROFESSORS:

Hugh F. Cline
(Sociology and Education)
Howard T. Everson
(Measurement, Evaluation, and Statistics)
Linda M. Hirsch
(Cognitive Studies in Education)

## ASSOCIATE PROFESSORS:

James E. Corter
(Measurement, Evaluation, and
Statistics/Cognitive Studies in Education)
Lawrence T. DeCarlo
(Measurement, Evaluation, and
Statistics/Cognitive Studies in Education)
Jane A. Monroe
(Measurement, Evaluation, and Statistics)

## ADJUNCT ASSOCIATE PROFESSORS:

Joseph R. Lao
(Developmental Psychology)
Judith Miller
(Developmental Psychology)

## ASSISTANT PROFESSOR:

Young-Sun Lee
(Measurement, Evaluation, and Statistics)

## ADJUNCT ASSISTANT PROFESSORS:

Janet F. Alperstein
(Sociology and Education)
Ann Cami
(Developmental Psychology)
David Guralnick
(Cognitive Studies in Education)
Alyse C. Hachey
(Cognitive Studies in Education)
Michael Hanchett Hanson
(Developmental Psychology)
Curtis Tatsuoka
(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
Web site: www.tc.edu/hud/Cognition
Cognitive Studies in Education
(Code: TKE)

## Degrees Offered:

Master of Arts (M.A.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

Applied Educational Psychology: Cognitive, Behavioral and Developmental Analysis (Code: TKF)

## Degree Offered:

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 four concentrations: Cognition and Learning, Intelligent Technologies, Reading Research, or Cognitive Studies of Educational Practice. Students beyond the M.A. level take more advanced courses, specifically including a statistics sequence.

In addition, each student registers 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 student's 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 program 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 testbeds 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, research 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 con-
nections 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 program'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.


## Special Application <br> Requirements/Information:

GRE general test is required for admission to the doctoral programs.

## Degree Requirements:

## Master of Arts-32 points

(Code: TKE)
Core Courses (9 points):

- HUDK 4029 Human cognition and learning (3)
- 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)
- HUDM 5123 Linear models and experimental design (3)

Research Practicum (3 points):

- HUDK 5324 Research work practicum (2-3) by permission, or
- HUDK 6539 Research practicum in educational psychology, cognition and learning (1-3)


## Human DEVELOPMENT

Breadth Requirement (6-9 points):
(each course 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
of education (3)
- A\&HL 4000 Introduction
- BBS 5068-5069

I and II ( $1-2$ each)

- BBSQ 4040 Speech and language
- ITSF 4010
- MSTU 4036
- MSTU 4133 Cognition and computers (3)
- 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 5024 Language development (2-3)
- 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 Psychology of memory (3)

Intelligent Technologies:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4035 Technology and human development (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 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 4010 | Psychology of reading (3) |
| :--- | :--- |
| - HUDK 5024 | Language development (2-3) |
| - HUDK 5080 | Reading comprehension (2-3) |
| - HUDK 5090 | Psychology of language <br> and reading (2-3) |
| - HUDK 6095 | Critical review of current <br> journals in psychology (3) |

- HUDK 4010 Psychology of reading (3)
- HUDK 5024 Language development (2-3)
- HUDK 5080 Reading comprehension (2-3)
- HUDK 5090 Psychology of language
- HUDK 6095 Critical review of current
journals in psychology (3)

| - ITSF 4010 | Cultural and social bases <br> of education (3-4) |
| :--- | :--- |
| - MSTU 4008 | Information technology <br> and education (3) |
| - MSTU 4036 | Hypermedia and <br> education (2-3) |
| - MSTU 4133 | Cognition and computers (3) <br> - ORLJ 4005 |
| Organizational psychology (3) |  |

Specialized Courses (33-36 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 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 Psychology of memory (3)

Intelligent Technologies:

- HUDK 4035 Technology and human development (3)
- HUDK 5039 Design of intelligent
learning environments (3)
- HUDK 5198 Psychology of instructional systems design (2-3)
- HUDK 6620 Special topics in developmental psychology (1-3)
- MSTU 4083 Instructional design of educational technology (3)

Reading Research:

- HUDK $4010 \quad$ Psychology of reading (3)
- HUDK 5024 Language development (2-3)
- HUDK 5080 Experimental psychology (2-3)
- HUDK 5090 Psychology of language and reading (2-3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HUDK 6620 Special topics in developmental psychology (1-3)

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)
- HUDM 5055 Evaluation of institutions,
programs, and curricula I (3)
- HBSK 4074 Development of reading comprehension strategies and study skills (3)
- HBSK 5099 Writing interventions theory/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 Practice- an empirical study of cognition in a classroom setting.

Doctor of Philosophy- 75 points (Code: TKE)
Breadth/Foundation Courses (12 Points):
Take one course (minimum of 3 points) in each of the following areas:

1. Biological Basis of Behavior:

| - BBS 5068-5069 | Brain and behavior I and II <br> (1-2 each) |
| :--- | :--- |
| - BBSN 5033 | Human clinical neuro- <br> psychology (3) |
| - MSTC 5000 | Neurocognitive models of <br> 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 Psychology of memory (3)
- CCPX 5020 Emotions, culture, and health (3)

3. Social Cultural Factors \& Individual Differences:

- HBSK 5031 Family as a context for child development (3)
- HUDK 5029 Personality development and socialization across the lifespan (2-3)
- HUDK 5040 Development and psychopathology: Atypical contexts (2-3)
- HUDK 5121 Personality development and socialization in childhood (2-3)
- HUDK 5125 Cross-cultural developmental psychology (2-3)
- CCPJ $5362 \quad$ Group dynamics (3-4)
- CCPX 5034 Developmental psychopathology (2-3)
- ORLJ 5017 Child psychopathology small group intervention: Theory and method (2-3)
- ORLJ 5106 Psychological aspects of organizations (2-3)
- ORLJ 5540 Pro-seminar in social psychology (2-3)

4. Measurement:

- HUDM 5059 Psychological measurement (3)

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 (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 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 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 Psychology of memory (3)

Intelligent Technologies:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4035 Technology and human development (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 Instructional design of
- MSTU 4133
- MSTU 4134 Cognition and computers lab (1-3)

Reading Research:

- HUDK 5024 Language development (2-3)
- HUDK 5080 Reading comprehension (2-3)
- HUDK 5090 Psychology of language
and reading (2-3)
- HUDK 6095 Critical review of current
- MSTU 4086 journals in psychology (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)
- HUDM 5055** Evaluation of institutions, programs, and curricula 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)

Special Seminars (minimum of 9 points):

- HUDK 6620 Special topics in developmental psychology (1-3) (taken during both first
and second years)
eminar (1-3)
- HUDK 8901 Dissertation advisement (0)
- TI 8900 Dissertation defense (0)


## 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: TKE)
Breadth/Foundation Courses (12 Points):
Take one course (minimum of 3 points) in each of the following areas:

1. Biological Basis of Behavior:

- BBS 5068-5069 Brain and behavior I and II
(1-2)
- BBSN 5033 Human clinical neuro-
- 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 Psychology of memory (3)
- CCPX 5020 Emotions, culture, and health (3)

3. Social Cultural Factors \& Individual Differences:

- CCPJ 5362 Group dynamics (3-4)
- HBSK 5031 Family as a context for child development (3)
- HUDK 5029 Personality development and socialization across the lifespan (2-3)


## Human DEVELOPMENT

| - HUDK 5040 | Development and psycho- <br> pathology: Atypical contexts <br> (2-3) |
| :--- | :--- |
| - HUDK 5121 | Personality development and <br> socialization in childhood (2-3) <br> Cross-cultural developmental |
| - HUDK 5125 | psychology (2-3) |
| - CCPX 5034 | Developmental psycho- <br> pathology (2-3) |
| - ORLJ 5017 | Small group intervention: <br> Theory and method (2-3) |
| - ORLJ 5106 | Psychological aspects of |
| organizations (2-3) |  |

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 5034 Cognitive research methods
- HUDK $6095 \quad$ Critical review of current
journals in psychology (3)
- HUDM 5058 Choice and decision making (3)
- HBSK 5096 Psychology of memory (3)

Intelligent Technologies:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4035 Technology and human
- HUDK 5034 Cognitive research methods and applications (3)
- HUDK 5035 Psychology of media (3)
- HUDK 5039 Design of intelligent learning
- HUDK 5198 Psychology of instructional
- MSTU $4031 \quad$ Programming I (4)
- MSTU 4083 Instructional design of educational technology (3)
- MSTU 4133 Cognition and computer (3)
- MSTU 4134 Cognition and computers lab (1-3)

Reading Research:

- HUDK 4010 Psychology of reading(3)
- HUDK 5024 Language development (2-3)
- HUDK 5080 Reading comprehension (2-3)
- HUDK 5090 Psychology of language and reading (2-3)
- HUDK 6095 Critical review of current
journals in psychology (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)
- HUDM 5055** Evaluation of institutions, programs, and curricula 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 during both first and second years)

- HUDK 7502 Dissertation seminar (1-3)
- HUDK 8901 Dissertation advisement (0)


## 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 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)
Professor Black and Tversky. Cognitive and information-processing approaches to attention, learning, language, memory, and reasoning.

## 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 life span.

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 (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 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 the research methods that have been employed by cognitive and developmental psychologists, as well as an overview of how these methods have been applied and the kinds of knowledge they have yielded.

HUDK 5024. Language development (2-3) Faculty. 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 (3)
Faculty. Permission required. Advanced discussion of topics in cognitive psychology and their implications for instruction.

HUDK 6523. Seminar in cognitive development (1-3)
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 (3) Faculty. Permission required. Topics to be announced.

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.

See also:
HBSK 4074. 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)
Permission required.
HUDK 6902. Advanced research and independent study (1-3)
Permission required.
HUDK 7502. Dissertation seminar (1-3) Permission required. Development of doctoral dissertation and presentation of plans for approval. Registration limited to two terms.

HUDK 8901. Dissertation advisement (0) 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:

## Human DEVELOPMENT

## 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. 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 computeraided instruction (3)
- MSTU 5191-5192. Educational video production I and II (3-4)
- MSTU 5194. Models of interactive learning (3-4)
** Effective 2006-07, HUDM 5053, 5055 and 5056 will be offered through the Department of Organization and Leadership. Please see the Organization and Leadership section of this bulletin.


## DEVELOPMENTAL <br> 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
Web site: www.tc.edu/hud/DevPsych
Psychology-Developmental
(Code: TKA)

## Degree Offered:

Master of Arts (M.A.)

## Program Description:

The Master of Arts in developmental psychology typically requires completion of 32 points, normally achieved in twelve months of full-time study or proportionately longer for part-time study.

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 pro-
gram of study, or may enter a concentration in Risk, Resilience, and Prevention, or Developmental Psychology for Educators.

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 go on to pursue more advanced degrees in particular areas of specialization.

## Special Application 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 Faculty) (2-3)
- HUDK 5023 Cognitive development (3)
- HUDK 5040 Development and psycho-
pathology: Atypical context
and populations (2-3)
Either one of the following two courses:
- HUDK 5121 Personality development and socialization in childhood (2-3)
- HUDK 5029 Personality development and socialization across the lifespan (2-3)

For the fifth course, there are several options:

- HUDK 5024 Language development (2-3)
or
- HUDK 4029 Human cognition and learning (2-3)
or
- BBS 5068-5069 Brain and behavior I and II (1-2 each)

Specialized Courses (two courses, 6 points): Two courses in developmental psychology or approved by an advisor.

Breadth Courses (three courses, 6-9 points): At least three courses in the programs at Teachers College outside of developmental psychology.

Statistics Course (one course, 3 points):

- HUDM 4120 Basic concepts in statistics (if no undergraduate statistics) (3)
- HUDM 4122 Probability and statistical inference (3)
or
- HUDM 5122 Applied regression analysis (3)

Research Practicum course ( 1 course, 3 points): Faculty in developmental psychology and cognitive studies offer research practica. Some are offered during the fall semester; some during the spring semester. Some require participation in both fall and spring semesters.

- HUDK 5324 Research work practicum (2-3)
- HUDK 6539 Research practicum in educational psychology, cognition, and learning ( $1-3$ )

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: (212) 678-4190
Email: brooks-gunn@columbia.edu
Web site: www.tc.edu/hud/DevPsych
Developmental Psychology
(Code: TKD)

## Degree Offered:

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 NPO's. 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 thesis.

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 adulthood, and later life. Course work 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 by 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 full-
time 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:

- General Psychology. Students choose four courses, with at least one chosen from four of the following areas: Learning and Cognition, Personality, Social Bases of Behavior, Measurement, and Biological Bases of Behavior.
- Doctoral Requirements. Students are required to take advanced courses in developmental psychology as well as pro-seminar.
- Methodology. All students are required to take at least the one-year statistics sequence (Probability and statistical inference and Applied regression analysis), ordinarily in the first year. Students are required to take a special certification examination in methodology. Students, in consultation with their advisor, should also enroll in the necessary advanced course work to prepare for both the research methods component of the certification examination and their own research work.
- Qualifying Paper. Students are required to write a theoretical and empirical paper to qualify for dissertation status.

First Year of Study: Three of the following four required courses in developmental psychology: 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); and HUDK 6529, Seminar in risk, resilience and developmental psychology (3). Two courses in statistics: HUDM 4122, Probability and statistical inference (3); and HUDM 5122, Applied regression analysis (3). A research seminar, HUDK 6620, Special topics in developmental psychology (1-3) for each of two semesters. One course in any one of the following breadth areas, determined in consultation with an advisor: Biological basis of behavior; cognitive basis of behavior; socio-cultural factors and individual differences; and measurement.

Second Year of Study: Completion of the fourth required developmental psychology course. A statistics course, HUDM 5123, Linear models and experimental design (3). Continued enrollment in HUDK 6620, Special topics in developmental psychology ( $1-3$ ) for each of two semesters. One course in each of the remaining three areas of the breadth requirement, determined in consultation with an advisor. Other requirements include an approved empirical paper (concomitant with

## Human <br> DEVELOPMENT

enrollment in HUDK 6901, Advanced research (1-3), and independent study in developmental psychology); service as a teaching assistant for two master's-level developmental psychology courses, teacher research practica, and supervisor of two-to-five master's student's special projects.

Third Year of Study: Two statistics courses: HUDM 6122, Multivariate analysis I (3); and either HUDM 6030, Multilevel and longitudinal data analysis (3), or HUDM 6055, Latent structure analysis (3), or HUDM 6123 , Multivariate analysis II (3); or another appropriate course. Oversee master's students. Other requirements include an approved theoretical paper (concomitant with enrollment in HUDK 6901, Advanced research (1-3), and independent study in developmental psychology); and the Certification Exam. After meeting certification requirements, 15 points (which may be completed during the third and fourth years) are taken in consultation with an advisor.

Fourth Year of Study: Completion of the 20 points begun in third year. HUDK 7501, Dissertation seminar in developmental psychology (1-3). Dissertation proposal due in the fall.

Culminating Experience: An approved doctoral dissertation.

## COURSES:

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. Topics include: methods of inquiry, the role of research in theory, formulating problems and hypotheses, sampling, measurement, and the design of empirical research. Opportunity to design research projects.

HUDK 4021. Developmental psychology: Infancy (2-3)
Doctors Cami and 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)
Dr. Cami. 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. Lao. 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 life span (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. The 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. Permission required. 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 life span.

HUDK 5024. Language development (2-3) Faculty. 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 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 5029. Personality development and socialization across the life span (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 5121. Personality development and socialization in childhood (2-3) Professor Brooks-Gunn. Prerequisite: HUDK 4020 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)Professors Black, Brooks-Gunn, Ginsburg, Kuhn, Luthar, and Tversky; and Doctors Cami, Hanson, and Lao. 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 6036-HUDK 6037. Child and family policy (3 each) Professor Brooks-Gunn. Prerequisites: Any 2 of the following: HUDF 4000; HUDF 4024; HUDK 4120; HUDK 4121; 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 each course)
Professor Brooks-Gunn. Permission required.
HUDK 6901. Advanced research and independent study ( $1-3$ each course) Professor Brooks-Gunn. Permission required.

## HUDK 7501. Dissertation seminar

(1-3 each course)
Permission required. Development of doctoral dissertations and presentation of plans for approval. Registration limited to two terms.

## HUDK 8900. Dissertation advisement

 (0 each course)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, <br> EVALUATION, AND <br> STATISTICS

The Measurement, Evaluation, and Statistics area of study includes the following programs: Applied Statistics; Measurement and Evaluation.

Program Coordinators:
Jane A. Monroe
(Applied Statistics)
Program Office: (212) 678-4150
Email:
monroe@tc.edu
Web site: www.tc.edu/hud/Measurement

Lawrence T. DeCarlo
(Measurement and Evaluation)
Program Office: (212) 678-4150
Email: decarlo@tc.edu
Web site: www.tc.edu/hud/Measurement

## APPLIED STATISTICS

(Code: TMX)

## Degree Offered:

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 course work, 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
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 Probability (3)*
- W 4107 Statistical inference (3)*
* These courses are taken at Columbia University's Graduate School of Arts and Sciences.


## 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:
At least 2 courses (for a minimum of 2 points each) must be taken at Teachers College from outside the department.

Culminating Experience: Special project.

## MEASUREMENT <br> AND EVALUATION

## (Code: TMM)

## Degrees Offered:

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, program 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 course work, 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, depart-

## Human <br> DEVELOPMENT

ments 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

 Requirements/Information:GRE General test is required for all programs in Measurement and Evaluation. Some preparation in college-level mathematics or statistics course work is required for doctoral study.

## Degree Requirements:

| Master of Education-60 points |  |
| :---: | :---: |
| Measurement and Evaluation |  |
| Core Courses (18 points) : |  |
| - HUDM 5055- 5056** | Evaluation of institutions, programs, and curricula I and II (3 each) |
| - HUDM 5059 | Psychological measurement (3) |
| $\text { JDM } 605$ | Psychometric theory I and II (3 each) |
| - HUDM 6055 | Latent structure analysis (3) |

Quantitative Methods (15 points):

- HUDM 4122 Probability and statistical
- HUDM $5122 \quad$ Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6030 Multilevel and longitudinal
- 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 $4120 \quad$ 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 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:

- HUDM 5053** Instrument design and validation (3)
- HUDM 5055- Evaluation of institutions, 5056** programs, and curricula I and II (3 each)
- HUDM 5058 Choice and decision making (3)
- CCPJ 5062 Career counseling and development (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 of 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 ( 24 points):

- HUDM 5055- Evaluation of institutions, 5056** programs, and curricula I and II (3 each)
- 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 5 points selected from the following:

- HUDM 5053** Instrument design and validation (3)
- HUDM 5058 Choice and decision making (3)
- HUDM 6552 Seminar: Selected topics in measurement theory (3)

Quantitative Methods and Research Design (27 points):

- HUD 4120 Methods of empirical research (3)
- HUDM 4122 Probability and statistical
- HUDM $5122 \quad$ inference (3) $\quad$ 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 6122-6123 Multivariate statistics I and II (3 each)
$\begin{array}{ll}\text { - HUDM 7500 } & \begin{array}{l}\text { Dissertation seminar } \\ \text { (1-3 each for two semesters) }\end{array} \\ \text { - HUDM 8900 } & \begin{array}{l}\text { Dissertation advisement (0) }\end{array}\end{array}$
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 from the areas of curriculum development, guidance, applied human development, supervision, and administration, and in consultation with an advisor.

Electives (maximum of 10 points):
Selected to meet special interests and needs.

Special Requirements: The first two years require full-time study, certification paper and examination; completion of an approved doctoral dissertation.

## 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. Topics include: methods of inquiry, the role of research in theory, formulating problems and hypotheses, sampling, measurement, and the design of empirical research. Opportunity to design research projects.

## HUDM 4050. Introduction to measurement

 (2-3) Professors DeCarlo and Chatterji. 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 5053. Instrument design and

 validation (3)Professor Chatterji. Prerequisite: HUDM 4050 or HUDM 5059 or equivalent. Methods for developing and validating attitude scales,
questionnaires, interview schedules, and performance measures. Item writing and the development of scoring protocols; item and scale quality; reliability and validity of scores.

## **HUDM 5055-HUDM 5056. Evaluation of

 institutions, programs, and curricula I and II (3 each)Professor Chatterji. Permission required.
Prerequisites for HUDM 5055: HUDM 4050, HUDM 4122, and HUD 4120 or equivalents. Prerequisite for HUDM 5056: HUDM 5055; HUDM 5122 is recommended. Lecture, discussion, laboratory, and fieldwork on the problems, issues, and procedures involved in designing and carrying out evaluation studies.

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, reliabity, 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 crosstabulation, 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)
Professor Corter. 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.
**Effective 2006-07 HUDM 5053, 5055, 5056 will be offered through the Department of Organization and Leadership. Please see listings.

HUDM 6026. Statistical treatment of mass data (3)
Professor Corter. 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) Professors DeCarlo and Monroe. 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) Professor Monroe. 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) Permission required.

HUDM 4902. Research and independent study: Applied statistics (1-3)
Permission required.
HUDM 6900. Advanced research and independent study (1-3)
Permission required.
HUDM 7500. Dissertation seminar (1-3) Permission required. Development of doctoral dissertations and presentation of plans for approval. Registration limited to two terms.

HUDM 8900. Dissertation advisement (0) 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.

## SOCIOLOGY <br> AND EDUCATION

Program Coordinator:
Professor Aaron M. Pallas
Program Office: (212) 678-4150
Email: pallas@tc.edu
Web site: www.tc.edu/hud/Sociology
Sociology and Education
(Code: TFS)

## Degrees Offered:

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 always has been given to education in other contexts.

The program staff 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. Staff 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 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 Amy Stuart Wells.

## 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 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 course work to be done in daytime classes at Columbia University's Graduate School of Arts and Sciences. 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 is required for all doctoral applicants, and doctoral applications are reviewed for fall term only.

## Degree Requirements:

Master of Arts-32 points
Master of Education-60 points

## Sociology Core Courses

(minimum of 12 points):
Select from:

- HUDF 4000 Education and public
policy (3)
- HUDF 4010 Sociology of online
learning (3)
- HUDF 4021 Sociology of education (3)
- HUDF 4022 Sociology of urban education (3)
- HUDF 4024 Social stratification and
- HUDF 4027 Sociology of classrooms (3)
- HUDF 4028 Sociology of the life course (3)
- HUDF 4029 Sociology of schools (3)
- HUDF 4031 Sociology of evaluation (3)
- HUDF 4032 Gender, difference, and curriculum (3)
- HUDF 5022 Sociological analysis of educational systems (3)
- HUDF 5621 Technology and society (3)
- HUDF 6525
- ITSF 5023
- ITSF 5120

Seminar in sociology of education (1-3)
The family as educator (3) Education in community settings (1-2)

## Research Methods (6 points):

- HUDM 4122 Probability and statistical inference (3)
- An approved course in qualitative methods
- Ed.M. students also complete HUDM 5122, Applied regression analysis (3)


## Policy Sequence ( 6 points):

- HUDF 5645 Policy seminar I (3), and
- HUDF 5646 Policy seminar II (3)

Colloquia (3 points):

- HUDF 4620 Introductory colloquium in sociology and education
(2-3)
or
- HUDF 5100 Supervised research and practice (1-6)


## Electives (3-5 points):

Selected in consultation with an advisor. (Ed.M. students will complete 28-30 points, in consultation with an advisor.)

Culminating Experience ( $0-2$ points):

- Master's comprehensive examination, or
- Master's essay and HUDF 6021, Social research methods: Reporting (2)


## 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 HUDF.

## 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, foundation 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 the-
ory. 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 aggression 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 Human Development, Curriculum and Teaching, and International and Transcultural Studies. 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

- HUDF 4000 Education and public
policy (3)
- HUDF 5645 Policy seminar I (3)


## Human <br> DEVELOPMENT

- HUDF 5646 Policy seminar II (3)
- Approved content-driven policy course (3)


## COURSES:

HUDF 4000. Education and public policy (3) Professor Wells. Current issues in American educational policy.

HUDF 4010. Sociology of online learning (3) Professor Natriello. Exploration of the social dimensions of online learning. Students examine the structure of online learning programs, the social organization of online learning communities, and the social experience of online learning activities

HUDF 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.

HUDF 4022. Sociology of urban education (3) Professor Wells. Analysis of urban schools and districts within the context of urban social and political systems.

HUDF 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

HUDF 4027. Sociology of classrooms (3) Professor Natriello. An examination of sociological research on the structure and operation of classrooms. Particular attention to the processes of stratification, socialization, legitimation, and social organization

HUDF 4028. Sociology of the life course 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.

HUDF 4029. Sociology of schools (3) Professor Natriello. An examination of socio logical research on the structure and operation of schools. Particular attention to the processes of socialization, stratification, and legitima-
tion as well as social organization and the sociology of school curriculum.

HUDF 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.

HUDF 4031. Sociology of evaluation (3) Professor Natriello. An examination of the social dimensions of the development and operation of different kinds of evaluation systems in modern societies. Major topics include the social, political, and intellectual contexts for evaluation, the institutional bases of evaluation activities, the social settings in which evaluation takes place, and the effects of evaluations on individuals and groups.

HUDF 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.

HUDF 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.

HUDF 4899. Federal Policy Institute (3) Professor Kagan. The purpose of the Federal Policy Institute is to examine three themes: the enduring values of American education, contemporary issues in national school reform efforts, and the role of the federal government. During a week-long program in Washington, students will have the opportunity to identify a policy issue of personal interest and to explore that issue with the nation's senior policymakers. Introductory and concluding sessions meet at the College.

HUDF 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.

HUDF 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.

HUDF 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.

HUDF 5621. Technology and society (3)
Dr. Cline. Explores the many and varied dimensions of the impact of changing information technologies on major social institutions in contemporary society.

HUDF 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.

HUDF 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.

HUDF 6021. Social research methods: Reporting (1-2)
Faculty. Student teams will analyze data and write a social science article.

HUDF 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.

ITSF 5023. The family as educator (3) Professor Leichter. Permission required. See the Department of International and Transcultural Studies for course description.

ITSF 5120-5123. Education in community settings (1-3)
Professor Leichter. Permission required.
See the Department of International and Transcultural Studies for course description

ITSF 6520. Seminar in families
and communities as educators (1-3)
Professor Leichter. Permission required.
See the Department of International and
Transcultural Studies for course description

## Individualized Studies

HUDF 4903. Research and independent study (1-3)
Permission required.
HUDF 5100. Supervised research
and practice (1-6)
Faculty.
HUDF 6903. Research and independent study (1-3)
Permission required.

HUDF 6920. Studies in sociology and education (1-8)

HUDF 7503. Dissertation seminar (0-3)
Permission required. Required of doctoral students in the semester following successful completion of certification examinations.

HUDF 8903. Dissertation advisement (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 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.
**Effective 2006-07 HUDM 5053, 5055 and 5056 will be offered through the Department of Organization and Leadership as ORL 5522, 5523 and 5524. Please refer to the Organization and Leadership section of this bulletin for more information.


# International and Transcultural Studies 

## PROGRAMS:

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## 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. It dedicates the resources of several social science disciplines and a program in bilingual education to developing the College's contribution to the understanding of global processes.

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 21 st 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, Economics, and Comparative and International Education emphasize research on the social, cultural, economic, and political aspects of global processes. The programs in International Educational Development and Bilingual Education prepare 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, privatization of education, and language and literacy. Students can concentrate within the department in such areas as African education, bilingual/bicultural education, family and community education, international humanitarian issues, 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 or economics (e.g., 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:

Thomas R. Bailey
(Economics and Education)
George C. Bond
(Anthropology and Education
and Applied Anthropology)
Lambros Comitas
(Anthropology and Education
and Applied Anthropology)
Ofelia Garcia
(Bilingual/Bicultural Education)
Charles C. Harrington
(Anthropology and Education
and Applied Anthropology)
Hope Jensen Leichter
(Comparative and International Education;
International Educational Development)
Henry Levin
(Economics and Education)
Francisco Rivera-Batiz
(Economics and Education)
Gita Steiner-Khamsi
(Comparative and International Education;
International Educational Development)
Mun C. Tsang
(Comparative and International Education;
International Educational Development)
Hervé Varenne
(Anthropology and Education
and Applied Anthropology)

## ASSOCIATE PROFESSORS:

Jo Anne Kleifgen
(Comparative and International Education;
International Educational Development)
Maria Emilia Torres-Guzman
(Bilingual/Bicultural Education)
Frances Vavrus
(Comparative and International Education;
International Educational Development)

## ADJUNCT ASSOCIATE PROFESSORS

Clive Belfield
Dale T. Snauwaert

## ASSISTANT PROFESSOR

Lesley Bartlett
(Comparative and International Education
International Educational Development)

## ADJUNCT ASSISTANT PROFESSORS:

Marion Boultbee
Louis F. Cristillo
Patricia Frenz-Belkin

## INSTRUCTOR:

Victoria Hunt
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; Applied Anthropology.

## ANTHROPOLOGY AND EDUCATION

Program Coordinator:
Professor Lambros Comitas

Program Office: (212) 687-4040
Email: comitas@tc.edu
Web site: www.tc.edu/its/Anthro
Anthropology and Education
(Code: TFA)

## Degrees Offered:

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## APPLIED <br> ANTHROPOLOGY

Program Coordinator:
Professor Lambros Comitas

Program Office: (212) 687-4040
Email: comitas@tc.edu
Web site: www.tc.edu/its/Anthro

Applied Anthropology
(Code: TFO)

## Degree Offered:

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 psychological anthropology-all from a strong crosscultural 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 which 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,

## INTERNATIONAL and TRANSCULTURAL

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 ( $9-12$ points) that directly contribute to the emerging professional interest of the candidate. The M.A. program requires an integrative project as well as an internship in addition to the 32 -point 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. To satisfy the breadth requirements, master's students must complete three Teachers College courses (for this purpose, a course is defined as one in which 2 points are earned) outside the major
program. Teacher certification, however, is not directly offered by the program in Anthropology and Education.

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 $30-36$ points must also be taken to complete the course of study.

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 course work 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 course work.

## 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 $\mathrm{B}+$ 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.

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 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. Within the major course requirements, 15 points in required courses must be taken: the four-semester sequence of colloquiums and summer field research (a minimum of 12 points) and an independent study (3 points) used in preparation for the certification examination and dissertation proposal. 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 <br> 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.

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 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, 30 points in required courses must be taken: the four semester sequence of colloquiums 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); two sub-discipline courses ( 6 points), one in linguistics and one from either archaeology or physical anthropology; and an independent study ( 3 points) used in preparation for the certification examination and dissertation proposal.

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 ( 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.

## 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, problems 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 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 (1-3)
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 6911. Work group in psychological anthropology ( $0-1$ )
Professor Harrington. This work group meets every other week to discuss current issues in psychological anthropology. It also discusses and reviews current research and proposals for research of work group 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)

## BILINGUAL/BICULTURAL EDUCATION

Program Coordinator:
Professor Ofelia Garcia
Program Office: (212) 687-3758
Email: bilingual-bicultural@tc.edu
Web site: www.tc.edu/academic/Bilingual/
Bilingual/Bicultural Education
(Code: TLB)

## Degree and Certificate Offered:

Master of Arts (M.A.)
Advanced Certificate in Bilingual Education

## Program Description:

In a world characterized by a greater flow of people, information, goods and services, bi/multilingualism and the ability to communicate cross-culturally are important resources. The program in Bilingual/Bicultural Education prepares educators, policy makers and researchers to understand issues surrounding the education of linguistically and culturally diverse students. The program also develops the understandings and strategies necessary to educate for bi/multilingualism, multiculturalism and cross-cultural understandings, and the use of multiple literacies. It does so while being mindful of the differences in educating language minority students, language majority students, and linguistically heterogeneous groups.

New York City, the most multilingual city of the world, and specifically the schools of New York City, give the program in Bilingual/Bicultural Education at Teachers College the ability to study in depth issues of bi/multilingualism and multiculturalism, especially as they are manifested in schools and classrooms. The program pays attention to the bilingual education of English Language Learners in the United States. It focuses on the kind of bilingual education known in the United States as dual language programs, programs where language minority and language majority children become bilingual and biliterate in each other's languages.

Students interested in policy and research, as well as international students, might be interested in the Master of Arts (M.A.) in Bilingual/Bicultural Education. Students interested in teacher certification may follow any of our Master of Arts in Bilingual/Bicultural Education that lead to a New York State teacher certification or an Advanced Certificate in Bilingual/Bicultural Education. Other programs and departments offer joint programs with a Bilingual/Bicultural Education
emphasis and specialization, which may lead to the bilingual extension New York State teachers certificate. All students must be bilingual.

## The course of studies offered:

- The M.A. in Bilingual/Bicultural Education not leading to New York State teacher certification is 33 points. This is for students who do not plan to be classroom teachers.
- The M.A. in Bilingual/Bicultural Childhood Education is for students pursuing Initial New York State teacher certification in Childhood Education (grades 1-6), Bilingual Education, and an optional Middle Childhood certification (grades 7-9). It has two streams. Stream A is for students without prior experience in education. Students take 40 points and must be bilingual. Stream B is for students who have student taught or are presently teaching. Students take 33 points and must be bilingual. - The M.A. in Bilingual/Bicultural Childhood Education (Transitional B) is only for students in the Peace Corps Fellows Program. Students complete an intensive 200 hour summer session, after which they follow a 33 point program.
- The M.A. in Bilingual/Bicultural Education leads to Professional New York State certification in the teaching area of the students' initial certificate and the bilingual certification. Students take 33 points. It is only open to students who already hold teacher certification in any area. Completion of this degree gives students professional certification in the area of their certification and initial bilingual certification.
- Advanced Certificate: Students who are pursuing teaching certification in another area or who already hold teaching certification or are simultaneously pursuing teacher certification in another area, are eligible for an Advanced Certificate in Bilingual/Bicultural Education which leads to the New York State Bilingual Extension Certification and consists of 15 points.

The program in Bilingual/Bicultural Education grants scholarships. Competitive scholarships are based on academic performance, field experience, and commitment to bilingual education to students in the teacher certification programs.

## Special Application <br> Requirements/Information:

In addition to the Teachers College admissions application, applicants to the M.A. and Advanced Certificate program in Bilingual/ Bicultural Education and those applicants who wish to add a bilingual specialization or emphasis to a cooperating Teachers College program must submit:

- Program application (available from the Office of Admission, the Program Office or the Web)
- Proof of Language proficiency (please see program application)
$\dagger$ Proficiency in a Language Other than English is required for the Program in Bilingual/ Bicultural Education. Students pursuing the NYS teacher certification programs must be proficient in English and a language other than English. Students must verify their proficiency in a language other than English by showing education or residence abroad, undergraduate coursework in a language other than English, language proficiency exam scores such as the GRE, SAT, or Peace Corps Assessment. It is also possible to take the language proficiency examination given by the Foreign Language Proficiency Testing Service: (212) 998-7030.

For further program information, contact the Program in Bilingual/Bicultural Education at Teachers College, Box 122,
525 West 120 Street, New York, NY 10027. Telephone: (212) 678-3758
Email: bilingual-bicultural@tc.edu

## Degree Requirements:

## Master of Arts

The different Master of Arts programs in Bilingual/Bicultural Education meet all requirements for initial and/or professional certification and the bilingual extension certification. All M.A. degree candidates are required to complete an integrative project. Please see the degree guide to determine to which program to apply. Also consult with an academic advisor.

## Degree Requirements:

## Master of Arts

All the different Master of Arts programs in Bilingual/Bicultural Education require an integrative project and a different student teaching/practicum experience.

All Master of Arts programs require:

- ITSF 4021 Foundations of bilingual/
- ITSF 4024 Linguistic foundations of bilingual/bicultural education (3)
- ITSF 4075 Cross-cultural communication and classroom ecology (3)
- ITSF 4150 Teacher inquiry bilingual/bicultural education (1-3)

Master of Arts programs leading to certification also require:

- ITSF 4020 Bilingualism and disabilities
(1)
- ITSF 4028
- ITSF 4121 Bilingual/bicultural curriculum design elementary/middle school (3)
- ITSF 4133 Curriculum and methods for bilingual teachers: Science (1-3)
- ITSF 4134 Curriculum and methods for bilingual teachers: Math (1-3)
- A\&HL 4076 TESOL methodologies for K-6 (2-3)

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. Master of Arts programs leading to certification (Stream B) require a half a year of student teaching (a total of 7 credits) for a total of 33 credits. All courses in the Master of Arts programs leading to certification are required.

Master of Arts programs that do not lead to certification require a 4 credit practicum for a total of 33 points. It is possible to take electives to complete this degree.

Advanced Certificate in Bilingual Education Students who already hold teaching certification in another area or who are simultaneously pursuing teacher certification in another area can choose to follow the 15-16 credit Advanced Certificate curriculum in Bilingual education which leads to the New York State Bilingual extension certification. The following courses are required:

- ITSF 4021 Foundations of bilingual/ bicultural education (3)
- ITSF 4075 Cross-cultural communication and classroom ecology (3)
- ITSF 4024 Linguistic foundations of bilingual/bicultural education (3)

Students may also elect to take:

- ITSF $4121 \quad$ Bilingual/bicultural curriculum design elementary/middle school (3)
- ITSF 4133 Curriculum and methods for bilingual education: Science (1-3)
- ITSF $4134 \quad$ Curriculum and methods for bilingual ed: Math (1-3) or
- ITSF 4028 Teaching literacy in bilingual
- ITSF 4720 Student teaching in bilingual/bicultural settings (4)

Bilingual Bicultural Education Emphasis
Students who wish to obtain an M.A., Ed.M., or Doctoral degree within another cooperating program may choose bilingual/bicultural education as an emphasis, if they are bilingual. They will simultaneously meet both their department's requirements and the requirements of the program in bilingual/bicultural education. Emphasis students who hold, or will hold teaching certification and wish to be recommended for the New York State's bilingual education extension certification, must take the advanced certificate specified above and will be assessed for bilingual proficiency. Emphasis students not seeking certification can take other courses in bilingual education in consultation with an advisor.

The number of points required for bilingual emphasis varies with the degree desired: 12 points for an M.A. (no transfer credits accepted); 18 points for an Ed.M.; 24 points for an Ed.D.

Students may apply for a bilingual emphasis in any of the programs and/or degree levels listed below. Emphasis code " B " must be specified with the program code on the application. Many of the cooperating programs also lead to New York State certification. Please refer to the application deadline dates as advertised by the College. Please see the Admissions section of this bulletin for more information.

Participating Degree Programs with an
Emphasis in Bilingual Education:
TALB Education Leadership (M.A., Ed.M., Ed.D.)

TCAB Mathematics Education
(M.A., M.S., Ed.M., Ed.D.)

TCEB Elementary School Science Education (M.A., M.S., Ed.M., Ed.D.)

TCHB Secondary School Science Education (M.A., M.S., Ed.M., Ed.D.)

TCTB Education of Teachers of Science (Ed.M., Ed.D.)
TCXB Supervision in Science Education (M.A., M.S., Ed.M., Ed.D.)

TDKB Adult Learning and Leadership (M.A., Ed.D.)

TEBB Blindness and Visual Impairment (M.A., Ed.D.)

TEDB Deaf and Hard of Hearing (M.A., Ed.D.)

TEGB Guidance and Rehabilitation (M.A.)

TFAB Anthropology and Education (M.A., Ed.M., Ed.D.)

TFGB Politics and Education (M.A., Ed.M., Ed.D.)

TFHB History and Education
(M.A., Ed.M., Ed.D.)

TFSB Sociology and Education (M.A., Ed.M.)

TFZB International Educational Development (M.A., Ed.M., Ed.D.)

TGMB Music and Music Education
(M.A., Ed.M., Ed.D., Ed.D.C.T.)

TJEB Psychological Counseling (Ed.M.)
TKEB Cognitive Studies in Education (M.A., Ed.D.)

TLAB Applied Linguistics (M.A., Ed.M., Ed.D.)

TLEB Teaching of English (M.A., Ed.M., Ed.D., Ed.D.C.T.)

TLZB Teaching of English to Speakers of Other Languages
(M.A., Ed.M., Ed.D.)

TMMB Measurement and Evaluation (Ed.M.)
TYDB Early Childhood Education
(M.A., Ed.M., Ed.D.)

TYPB Elementary/Childhood
Education-Preservice (M.A.)

TYZB Curriculum and Teaching (M.A., Ed.M., Ed.D.)

## COURSES:

ITSF 4020. Bilingualism and disabilities (1) Faculty. This course examines the interaction between disability and bilingualism through the life span 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.

ITSF 4021. Foundations of bilingual/ bicultural education (3)
Professor Garcia. Review of the linguistic, sociocultural, philosophical, political, and historical foundations that have shaped bilingual education policies, program models, and teaching and assessment practices, with special emphasis on the United States. Study of the bilingual learner and of bilingualism in childhood and adolescence, and in different societal contexts. Analysis of how diverse bilingual education program models throughout the world respond to different linguistic, social, and educational goals.

ITSF 4024. Linguistic foundations of bilingual/bicultural education (3) Professor Kleifgen. 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.

ITSF 4075. Cross-cultural communication and classroom ecology (3)
Professor Torres-Guzman. 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 minority 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.

ITSF 4027. Current topics in bilingualism and bilingual/bicultural education (1-3) Faculty. Studies of selected topics in bi/multilingualism and bilingual/bicultural education.

ITSF 4028. Teaching literacy in bilingual settings (3)
Professor Garcia. 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.

ITSF 4121. Bilingual/bicultural curriculum design in elementary and middle schools (3) Faculty. 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 \& materials for use in language arts and content areas; c) integration of popular/multimedia (e.g., cinematic education) approaches in languages acquisition; d) critique of current commercially prepared products. This course is conducted in collaboration with the Film $\mathcal{E}$ Education Research Academy (FERA) at TC.

ITSF 4133-ITSF 4135. Curriculum and methods for bilingual teachers (1-3)
Faculty. Permission required. Prerequisites: ITSF 4021 and ITSF 4121, 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.

- ITSF 4133. Science


## - ITSF 4134. Mathematics

- ITSF 4135. Language arts

ITSF 4150. Teacher/educational inquiry: Bilingual/bicultural education (1-3)
Professors Torres-Guzman and Garcia. 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. Courses supports students in development and presentation of their Integrative Project. Offered only in the fall. The course meets until March.

ITSF 4323. Practicum/student teaching for practicing teachers in bilingual/bicultural education (3)
Ms. Hunt. Permission required. Practicum for experienced teachers in bilingual institutional settings.

ITSF 4325. Practicum/internship in bilingual/bicultural institutions (3) Ms. Hunt. Permission required. Practicum for non-certification students in bilingual institutional settings.

ITSF 4720. Student teaching in bilingual/bicultural education (3-4) Ms. Hunt. Permission required. Student teaching in a bilingual elementary classroom. Experiences include second language teaching (ESL and LOTE as a Second Language), native language teaching (English and the LOTE). Special emphasis in teaching all content areas, observation, and supervised practice.

ITSF 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.

ITSF 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.

ITSL 5023. School counseling of bilingual/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.

## ITSF 5024. Bilingual/multilingual

 education: International perspectives (3) Professor Torres-Guzman. A survey of bilingual/multilingual educational policies and practices in highly industrialized and developing nations. While such models and designs are analyzed from a comparative educational perspective, much attention is given to the ethnolinguistic, social, economic, and political nuances of each nation.ITSF 5512. Bilingual/multicultural education program development and change theory (1-3) Faculty. Permission required. Analysis of change theory with emphasis on factors affecting development, implementation, staffing, and administration of bilingual/bicultural programs.

ITSF 5513. Staff development in multilingual/multicultural settings (3)
Professor Torres-Guzman. Permission required. Critical study of theory and practice of staff development in multilingual/multicultural settings.

ITSF 6202. Advanced fieldwork
(1-6 each course)
Permission required.

ITSF 6402. Internship in
bilingual/bicultural education (1-6)
Permission required. Occasional opportunities in college programs in areas represented by the department. Students must inquire to see if opportunities are available during any given semester.

## ITSF 6521. Seminar in

bilingualism/bilingual education (3)
Professors Garcia and 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.

## 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.

- ITSF 4021. Foundations of bilingual/bicultural education (3)
- ITSF 4024. Linguistic foundations of bilingual/bicultural education (3)
- ITSF 4075. Cross-cultural communication and classroom ecology (3)
- ITSF 4027. Current topics in bilingualism and bilingual/bicultural education (1-3)
- ITSF 5123. School counseling of bilingual/bicultural children (3)
- ITSF 5024. Bilingual/multilingual education: International perspectives (3)



## INTERNATIONAL <br> Education Programs

Program Coordinator:
Professor Gita Steiner-Khamsi

Program Office: (212) 678-3184
Email: iedcieinfo@tc.columbia.edu
Web site: http://www.tc.edu/its/CIE\&IED
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 any area of concentration offered throughout the College.

Teachers College offers two programs in international education:

Comparative and International Education (Code: TFI)

International Educational Development (Code: TFZ).

Prospective students should visit the web site and email the program assistant (iedcieinfo@tc.columbia.edu) for more information.

## 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.

Since 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 or 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, non-governmental organizations, governmental organizations, businesses and corporations, and private and public educational institutions.

The only 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 concentrations 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 for 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 (see below).

## COMPARATIVE AND INTERNATIONAL EDUCATION

Comparative and International Education (Code: TFI)

## Degrees offered:

Master of Arts (M.A.) - 32 credits, deadline: January 15
Master of Education (Ed.M.) - 60 credits, deadline: January 15
Doctor of Philosophy (Ph.D.) - 75 credits, deadline: December 15

Up to 30 graduate-level credits can be transferred into the Ed.M. and Ph.D. degree programs.

Areas of concentration offered inside the Department of International and Transcultural Studies:

- Anthropology
- Economics

The following presents a description of concentrations in Comparative and International Education offered in the department.

## Anthropology

The programs in Anthropology and Education offer 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. In addition, the programs offer coursework in applied anthropology, which involves 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.

## Economics

Economics is a powerful tool for scholars and educational practitioners who wish to develop a better understanding of educational institutions and decisions. 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. The list of courses offered in anthropology and economics can be found under the respective degree programs, listed in this section of the catalog.

Areas of concentrations offered outside the Department of International and Transcultural Studies:

- 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 <br> EDUCATIONAL <br> DEVELOPMENT

International Educational Development
(Code: TFZ)

## Degrees offered:

Master of Arts (M.A.) - 32 credits,
deadline: January 15
Master of Education (Ed.M.) - 60 credits, deadline: January 15
Doctor of Education (Ed.D.) - 90 credits, deadline: January 2

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
- Bilingual/Bicultural Education
- Family and Community Education
- Finance and Planning
- International Humanitarian Issues
- International Education Policy Studies
- Language, Literacy and Technology
- Peace Education (only at M.A. and Ed.M. level)

The following presents a description of concentrations in International Educational
Development offered in the department.

## 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:
Frances Vavrus (liaison), George Bond.

## 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: Ofelia Garcia (liaison), Maria Torres Guzman, 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 television 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), Herve Varenne.

## Finance and Planning

The Finance and Planning concentration is devoted to the preparation of researchers, policy analysts, as well as mangers 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 (liaison), Henry M. Levin, Francisco Rivera-Batiz.

## 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 peri-

# INTERNATIONAL and TRANSCULTURAL 

ods 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, such as the African Services Committee or the International Rescue Committee with whom standing internship programs exist.

Faculty affiliated with the concentration: Frances Vavrus (liaison), Gita Steiner-Khamsi, Lesley Bartlett.

International Education Policy Studies
The International Education Policy 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, Ofelia Garcia, Hope Jensen Leichter, Henry M. Levin, Frances Vavrus.

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 immigrants 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 Bilingual/Bicultural Education and 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, Ofelia Garcia, Maria Torres-Guzman, Herve Varenne, Frances Vavrus.

## 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 for M.A. and Ed.M. students. 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 non-formal 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:
Lesley Bartlett (liaison), Monisha Bajaj,
Henry M. Levin, and Frances Vavrus.
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 pro-gram-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 Requirements/Information:

Applicants to the master's and doctoral degree in the international education programs must indicate their area of concentration and a geographical or transcultural area of specialty 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.
degree programs should have a Master's 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.

## Degree Requirements:

The programs are designed to provide students with challenging course work 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, ITFS 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)

- 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, ITFS 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.


## Doctoral of Education (90 points)

(International Educational Development only)
Core Courses: 12 points (ITSF 4090, 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 4090, and one additional 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)
Professor Garcia. 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 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.

ITSF 4090. Issues and institutions in international educational development
Professors Tsang and Vavrus. 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.

ITSF 4091. Comparative education
Professors Bartlett and Steiner-Khamsi. Introduction to theories in comparative education, cross-national comparative analysis, educational indicator research, educational transfer and borrowing, and the relation between culture and education.

## General Courses

Note that general courses are not offered every year.

## 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, Educational Exchange, 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 5691. Colloquium on international education and the United Nations - Goals and content: Major world developments and their implications for education (3)
Professor Gita 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 4013. Literacy and development (2-3) Professor Bartlett. This course examines common assumptions about the relationship between literacy and personal cognitive and/or national, social, political or economic development.

ITSF 4014. Urban situations and education (3-4)
Professor Bond. See course description under Anthropology programs 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)

Professor Garcia. 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 4055. Resource allocation in education (3)
Professor Levin. See course description under Economics course listing.

ITSF 4092. Qualitative research and evaluation in international education (3) Professor Steiner-Khamsi. The study of qualitative methodologies appropriate to various kinds
of educational programs, issues, and problems in diverse research settings. Section 2 Enrollment limited. Evaluation of ongoing international or multicultural education projects in New York City or abroad. (Also offered as an online course).

ITSF 4093. Preparation of instructional materials for developing countries (3)
Faculty. Problems, issues, and approaches in the preparation of written and other instructional materials for developing countries.

ITSF 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.

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 4155. Evaluating educational privatization and school choice (3) Professor Levin. See course description under Economics course listing.

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)
Faculty. Focuses on issues and problems of human rights, global ethics, gender issues, and various aspects of structural and cultural violence. Offered in distinct versions in fall and spring; one emphasizing ethical issues and the other gender perspectives. Another course in human rights may be substituted for the concentration in peace education.

ITSF 4611. Education for global security (3) 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.

ITSF 4613. Fundamental concepts in peace education (3)
Faculty. This course provides a grounding in the evolution theory and pedagogy 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.

ITSF 4614. The United Nations as peace educator (3)
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.

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 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 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 5090. Education and demographic change (3)
Professor Vavrus. 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 5120-ITSF 5123. Education in community settings
Professor Leichter. Permission required. A review and an analysis of educational issues and opportunities in various community settings. Special fee: $\$ 5$.

- ITSF 5120. Museums (3)
- ITSF 5121. Community centers (2-3)
- ITSF 5122. Correctional institutions (1-2)
- ITSF 5123. Outdoor education and cultural tourism (1-2)

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)
Faculty. Permission required. This course pursues educational issues within transcultural contexts, including topics such as colonialism, nationalism, and multi-national and donor influences in education.

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 6590. Doctoral seminar in international and transcultural studies (1-3)
Faculty. Permission required. Presentation of research in progress and examination of professional roles.

## ECONOMICS AND EDUCATION

Program Coordinator:
Francisco Rivera-Batiz

Program Office: (212) 687-3152
Email: flr9@columbia.edu
Web site: www.tc.edu/its/Economics
Economics and Education
(Code: TFE)

## Degrees Offered

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 Policy-makers, 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.

Currently, 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 markets, and others.

## Special Application <br> Requirements/Information:

The GRE General Test is required for the Ph.D. program. Some 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:

(For out-of-department courses, please check the appropriate department for course descriptions.)

ITSF 4050. Economic 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 outcomes, school reform, and school choice.

## ITSF 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.

## ITSF 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.

ITSF 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.

ITSF 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.

ITSF 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.

ITSF 4151. Special topics in the economics of education (3)
Professors Bailey, Levin, Rivera-Batiz and Tsang. A seminar on topics in the economics of education. Themes to be announced each term.

ITSF 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.

ITSF 5550. Workshop in economics and education (3)
Professors Bailey, Belfield, and Levin. 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.

ITSF 5650. Readings in the economics of education (3)
Program 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.

ITSF 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.
(For out-of-department courses, please check the appropriate department for course descriptions.)

- HUDM 5122. Applied regression analysis (3)
- ORLA 4025. School business administration (3)
- ORLA 5020. Information systems for decision-making in learning organizations (3)
- ORLD 4030. The economics of post-secondary education (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.

## Departmental Courses

ITSF 4060. The Latino population of the United States (3)
Professor Rivera-Batiz. Interdisciplinary course examining the major issues affecting the Latino population of the United States. Focus is on the methods and perspectives utilized by social scientists to analyze the Latino experience. Major social, demographic, economic, and political trends will be discussed.

ITSF 4195. Academic literacies (2-3) Dr. Frenz-Belkin. 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 ( $1-3$ per section)
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)
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)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) 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 TECHNOLOGYIN EDUCATION163
Communication and Education
Computing in Education
Instructional Technology and Media
TECHNOLOGY SPECIALIST ..... 164
MATHEMATICS EDUCATION ..... 171
SCIENCE EDUCATION ..... 175


## 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 also is 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 houses the College's Programs in three areas: Mathematics Education; Science Education, and Communications, 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 at all its levels 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 technology program includes technology's influence on areas such as literacy, teacher education, 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
(Communication, Computing, and Technology in Education; Developmental Psychology;
Cognitive Studies in Education)
Charles K. Kinzer
(Communication, Computing,
and Technology in Education)
Robert McClintock
(Communication, Computing,
and Technology in Education)
Frank Moretti
(Communication, Computing,
and Technology in Education)
Herve Varenne
(Communication, Computing,
and Technology in Education; Anthropology and Education; Applied Anthropology)
Bruce R. Vogeli
(Mathematics Education)

## VISITING PROFESSORS:

J. Peter Garrity
(Mathematics Education)
Henry Landau
(Mathematics Education)
Henry O. Pollak
(Mathematics Education)
J. Philip Smith
(Mathematics Education)
ADJUNCT PROFESSORS:
Jamsheed Akrami
(Communication, Computing,
and Technology in Education)
Michael J. Passow
(Science Education)

ASSOCIATE PROFESSORS:
Alexander Karp
(Mathematics Education)
Jo Anne Kleifgen
(Communication, Computing, and
Technology in Education; International
Educational Development; Comparative and International Education)
Xiaodong Lin
(Communication, Computing,
and Technology in Education)
Robert P. Taylor
(Communication, Computing,
and Technology in Education)

ADJUNCT ASSOCIATE PROFESSORS:
Howard Budin
(Communication, Computing,
and Technology in Education)
Susan Lowes
(Communication, Computing, and Technology in Education) Thane B. Terrill
(Communication, Computing,
and Technology in Education)

ASSISTANT PROFESSORS:
Felicia Moore
(Science Education)
Ann Rivet
(Science Education)
Keith Sheppard
(Science Education)
Lalitha Vasudevan
(Communication, Computing,
and Technology in Education)
Erica Walker
(Mathematics Education)
ADJUNCT ASSISTANT PROFESSORS:
Brian Baldwin
(Science Education)
Patrizia Magni
(Communication, Computing,
and Technology in Education)
Ellen Meier
(Communication, Computing,
and Technology in Education)
Tara O'Neill
(Science Education)
Kathy Powell
(Communication, Computing, and Technology in Education)
Dennis M. Robbins
(Science Education)
Courtney St. Prix
(Science Education)

## INSTRUCTORS:

Paul Acquaro
(Communication, Computing, and Technology in Education) Xin Bai
(Communication, Computing, and Technology in Education) Craig Bolotin
(Communication, Computing, and Technology in Education) Shawna Bú Shell
(Communication, Computing, and Technology in Education) Gordon Campbell
(Communication, Computing, and Technology in Education) Yaowen Chang (Communication, Computing, and Technology in Education)

Thomas A. Covotsos
(Science Education)
Shuli Gilutz
(Communication, Computing, and Technology in Education) Archana Gollamudi
(Communication, Computing, and Technology in Education) Steven Goss
(Communication, Computing, and Technology in Education)
Verneda E. Johnson
(Science Education)
Angela Kelly
(Science Education)
Ryan Kelsey
(Communication, Computing, and Technology in Education)
Sheila Kieran-Greenbush
(Communication, Computing,
and Technology in Education)
Timothy Levin
(Science Education)
Lin Lin
(Communication, Computing, and Technology in Education) Ulises Mejias
(Communications, Computing
and Technology in Education)
Brenda I. Lopez-Ortiz
(Communication, Computing,
and Technology in Education)
Laura Pesutti
(Science Education)
Jennifer Fitzsimmons Riccio
(Science Education)
Charlie Roberts
(Communication, Computing,
and Technology in Education)
Mario Riccobon
(Communication, Computing,
and Technology in Education)
Patrick Slater
(Communication, Computing,
and Technology in Education)
Kristin Sosulski
(Communication, Computing,
and Technology in Education)
Lance Vikaros
(Communication, Computing,
and Technology in Education)
Yan Wang
(Communication, Computing,
and Technology in Education)
Stuart Weinberg
(Mathematics Education)
Doris Zahner
(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: | tccte@tc.edu |

Web site: www.tc.edu/mst/CCTE
The Communication, Computing, and Technology in Education area of study includes the following programs: Communication and Education; Computing in Education; Instructional Technology and Media.

## COMMUNICATION <br> AND EDUCATION

## Communication and Education

(Code: TUC)

## Degrees Offered:

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

## COMPUTING <br> IN EDUCATION

Computing in Education
(Code: TUD)

## Degree Offered:

Master of Arts (M.A.)

## INSTRUCTIONAL <br> TECHNOLOGY <br> AND MEDIA

Instructional Technology and Media
(Code: TUT)

## Degrees Offered:

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

## 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. 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: towards 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.

CCTE's programs deal with the many ways in which material culture changes and shapes educational practice. Listed are current assumptions about the long-run effects that innovations in information, communication, and gaming 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:

- 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.
- With the emerging intellectual conditions, activities contributing to the creation of knowledge will increase in relative value, while those devoted solely to its dissemination will decrease.
- 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, gaming, 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. Although these concerns are common to all three programs, each has distinct nuances with respect to methods and purpose:

- Communication and Education 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 and Education works with computer information systems to facilitate the effective extension of digital technologies into educational practice. This strand includes within it an intensive master's 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 innovative 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 all engage in research, development, theory, and application. All three programs put a high priority on group work; field work 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.ccnmtl.columbia.edu) work closely with CCTE faculty members and students and provide a wide range of internship and fieldwork opportunities. Short video seg-
ments of several CCTE faculty members talking about their courses and interests are found through the CCTE program web site. (www.tc.edu/mst/ccte)

Communication and Education The program in Communication and Education prepares students for various roles:

- Teaching and research positions in higher education;
- Working in schools using information and communications 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; and - Explore positive and negative 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, the student 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 the meanings actually, and potentially, communicated-whether in face-to-face conversation through a global broadcast using satellite transmission 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 communications 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 in Computing and Education:

This track was designed primarily for those teachers who live too far from Manhattan to attend courses during the regular academic year. 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. The degree can be obtained in two summers and the intervening academic year but can also be done over a longer period of time.

Courses and independent study work focus on all aspects of using computers in teaching and learning, including theories of instructional design, use of software, new technologies such as hypermedia and telecommunications, teaching strategies, and software production. The Intensive Program accepts about 20 new students per summer, and over the past ten years more than 150 students have completed the program. Housing is arranged at a Columbia dormitory. For more information, write Professor Howard Budin, Teachers College, Box 8; call (212) 678-3773; email hb50@columbia.edu, or visit www.tc.edu/ctsc/imhome.htm.

## Technology Specialist Program:

A new M.A. program leading to a New York State license for "Technology Specialist K-12" prepares candidates to become technology coordinators within a school building. Student teaching and fieldwork are required parts of the program. The program is available to those with or without initial teaching licenses but who have prerequisite knowledge and experience in using technology in teaching. For further information, contact Professor Howard Budin, Teachers College, (212) 678-3773; hb50@columbia.edu.

## 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 2nd 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: (TC Box 8; phone (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 (32 POINTS REQUIRED)

To earn the Master of Arts (M.A.), students must satisfactorily complete 32 points of course work ( 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 and Education, Computing and Education, and Instructional Technology and Media. In each of these M.A. programs, students must take coursework totaling at least 32 points. Within this requirement, students must:

1. Take the Core Seminar MSTU 4000 (for 1 point) as early as possible, hopefully in the first term in the program. This course provides an overview of the programs and field and helps students begin thinking about the integrative M.A. Project.
2. Take the 3 required courses in the major program area ( 9 points, see program lists below).
3. Take at least 3 additional Core Program courses in the major program area ( 9 points, see sample program lists below and consult the handbooks available in the CCTE program office).
4. Take at least 1 course ( 3 points) within Communication, Computing, and Technology (courses with MSTU prefix) that is outside the major program area. Any course from your major area that is cross-listed with another area can meet this requirement.
5. Take 3 courses at Teachers College outside Communication, Computing, and Technology (courses with a prefix other than MSTU), each for at least 2 points, for a total of at least 6 points.
6. Successfully complete the 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. For students hoping to progress to the Ed.M. and/or Ed.D. degrees, this project should be the beginning of a line of work that could progress through a series of projects potentially leading to the doctoral dissertation.

Communication and Education (M.A.)
Required and Core Courses
Required Courses

- MSTU 4016 History of communication
- MSTU 4020 Social and communicative aspects of the internet and other ICT's
- MSTU 4024 TV and the development of youth
Additional courses as prescribed in the program guide for the degree.


## Core Courses

- HUDK 4035

Technology and human development

- HUDK 5035 Psychology of media
- MSTU 4010 Theories of communication
- MSTU 4018 Design and communication in modern culture
- MSTU 4022 Telecommunications and distance learning
- MSTU 4023 Cinema as cross-cultural communication
- MSTU 4049 Technologies and literacies
- MSTU 4052 Computers, problem solving and cooperative learning
- MSTU 4133 Cognition and computers
- MSTU 5020 Computer-mediated communication
- MSTU 5555 Technology and the emergence of a global curriculum
Additional courses as prescribed in the program guide for the degree.

Computing and Education (M.A.)
Required and Core Courses

## Required Courses

- MSTU 4031 Programming I
- MSTU 4133 Cognition and computers
- MSTU 5031 Programming II


## Core Courses

- MSTU 4022 Telecommunications and distance learning
- MSTU 4036 Hypermedia and education
- MSTU 4052 Computers, problem solving, and cooperative learning
- MSTU 4085 New technologies for learning
- MSTU 4134 Cognition and computers lab
- MSTU 5005 Case-based teaching electronic environments
- MSTU 5030 Intelligent computerassisted instruction
- MSTU 5035 Technology and metacognition
- MSTU 5555 Technology and the emergence of a global curriculum

Additional courses as prescribed in the program guide for the degree.
Instructional Technology and Media (M.A.)
Required and Core Course List

## Required Courses

- MSTU 4031 Programming I
- MSTU 4083 Instructional design of educational technology
- MSTU $5031 \quad$ Programming II

Core Courses

- HUDK 4035 Technology and human development
- MSTU 4022 Telecommunications and distance learning
- MSTU 4024 TV and the development of youth
- MSTU 4036 Hypermedia and education
- MSTU 4133 Cognition and computers
- MSTU 4134 Cognition and computers lab
- MSTU 5005 Case-based teaching in electronic environments
- MSTU 5020 Computer-mediated
- MSTU $5030 \quad \begin{aligned} & \text { communication } \\ & \text { Intelligent computer- }\end{aligned}$ assisted instruction
- MSTU 5035 Technology and metacognition
- MSTU 5555 Technology and the emergence of a global curriculum
Additional courses as prescribed in the program guide for the degree.

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. Please see Fieldwork and Internships sections for further information.

## Master of Education <br> (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 course work. In addition to completing the minimum course requirements and developing a skill specialization, candidates for the Ed.M. degree should culminate their work through a research or development project submitted to the faculty. Like the M.A. integrative project, it should result from independent effort equivalent to that of a 3 point course. This project should represent the student's interests as well as display the specialized skills developed for the degree.

Master of Education (Ed.M.) programs are offered in Communication and Education and Instructional Technology and Media. In each of these Ed.M. programs, students must take coursework totaling at least 60 points. Within this requirement, students must:

1. Take the Core Seminar MSTU 4000 (for 1 point) as early as possible, hopefully in the first term in the program. This course provides an overview of the programs and field, and helps students begin to think about the Ed.M. project.
2. Take the 4 required courses ( 12 points, see lists below) in the major program area (18 points, see program lists below).
3. Take at least 6 additional Core Program courses (18 points, see sample lists below and consult the handbooks available in the CCTE program office) in the major program area.
4. Take at least 1 course ( 3 points) within Communication, Computing, and Technology (courses with MSTU prefix) that is outside the major program area. Any course from one major area that is cross-listed with another area can meet this requirement.
5. Take 3 courses at Teachers College outside Communication, Computing, and Technology (a prefix other than MSTU) each for at least 2 points, for a total of at least 6 points.
6. Take approximately 6 other courses chosen in consultation with an advisor.
7. Altogether, these courses should total at least 60 points.
8. Propose to one's faculty advisor and, after approval, successfully complete the Ed.M. Project (approved by the advisor).

Communication and Education (Ed.M.)
Required and Core Courses

## Required Courses

- MSTU 4020

Social and communicative aspects of the internet

- MSTU 4016 History of communication
- MSTU 4024 TV and the development of youth
- MSTU 5606 Colloquium on communication and education
Additional courses as prescribed in the program guide for the degree.


## Core Courses

- HUDK 4035 Technology and human
- HUDK 5035 development
-HUDK 5035 Psychology of media
- MSTU 4010 Theories of communication
- MSTU 4018 Design and communication in modern culture
- MSTU 4022 Telecommunications and distance learning
- MSTU 4023 Cinema as cross-cultural communication
- MSTU 4049 Technologies and literacies
- MSTU 4052 Computers, problem solving, and cooperative learning
- MSTU 4133 Cognition and computers
- MSTU 5020 Computer-mediated communication
- MSTU 5555 Technology and the emergence of a global curriculum
Additional courses as prescribed in the program guide for the degree.

Instructional Technology and Media (Ed.M.)
Required and Core Courses

## Required Courses

- MSTU 4031 Programming I
- MSTU 4083 Instructional design of Educational technology
- MSTU 5031 Programming II


## Core Courses

- HUDK 4035 Technology and human development
- MSTU 4022 Telecommunications
- MSTU 4024 and distance learning
- MSTU 4036 $\begin{array}{ll}\text { of youth } \\ \text { Hypermedia and education }\end{array}$
- MSTU 4133 Cognition and computers
- MSTU 4134 Cognition and computers lab
- MSTU 5005
- MSTU 5030 mediat communication
- MSTU 5035 assisted instruction
metacognition
- MSTU 5555 Technology and the emergence of a global curriculum
Additional courses as prescribed in the program guide for the degree.

Students accepted for a doctoral program should earn the Ed.M. as an integral part of their doctoral work. The Ed.M. can be, however, 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 doctorallevel 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 accord 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 include basic courses, a skill concentration, and independent projects, all leading to the certification examination and the dissertation. Doctoral candidates should consult CCTE's description of the specific steps to the doctorate in Communication and Education and Instructional Technology and Media. These steps to the doctorate 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 high-
est 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 Communication and Education and Instructional Technology and Media. In each of these Ed.D. programs, students must take coursework totaling at least 90 points. Within this requirement, students must:

1. Take the Core Seminar MSTU 4000 (for 1 point) as early as possible, hopefully in the first term in the program. This course provides an overview of the programs and field and helps students begin thinking about projects and dissertation research. After taking the Core Seminar, continuous registration in the CCTE Colloquium (MSTU 6600) is recommended.
2. After the Core Seminar, continuous registration in the CCTE Colloquium (MSTU 6600,0 or 1 point) is required. Students must register for 0 or 1 point each semester, but must register for a total of 2 points. This course assists students in all phases of their doctoral work (starting research, developing projects, certification, dissertation proposals, etc.). Guest speakers are invited to present the latest work in the field.
3. Take the 4 required courses in the major program area (12 points, see program lists below).
4. Take at least 6 additional Core Program courses in the major program area ( 18 points, see program lists below and consult the handbooks available in the CCTE program office).
5. Take at least 1 course ( 3 points) within Communication, Computing, and Technology (courses with MSTU prefix). Any course from your major area that is cross-listed with another area can meet this requirement.
6. Take 3 courses at Teachers College outside Communication, Computing, and Technology (a prefix other than MSTU), each for at least 2 points, for a total of at least 6 points.
7. Take approximately 13 other courses chosen in consultation with a faculty advisor.
8. Complete the doctoral Certification Process (see the explanation later in this section).
9. Sucessfully propose, complete and defend the doctoral dissertation. Register for the Dissertation Seminar (MSTU 7501 or 7503 , 3 points) when presenting the Dissertation Proposal.
10. Altogether, these courses should total at least 90 points.

Communication and Education (Ed.D.)
Required and Core Courses

## Required Courses

- MSTU 4016 History of communication
- MSTU 4020 Social and communicative aspects of the internet)
- MSTU 4024 TV and the development
- MSTU 5606 Colloquium on communication and education
Additional courses as prescribed in the program guide for the degree.


## Core Courses

- HUDK 4035 Technology and human development
- HUDK 5035 Psychology of media
- MSTU 4010 Theories of communication
- MSTU 4018 Design and communication
- MSTU $4022 \quad \begin{aligned} & \text { in modern culture } \\ & \text { Telecommunications }\end{aligned}$ and distance learning
- MSTU 4023 Cinema as cross-cultural communication
- MSTU 4049 Technologies and literacies
- MSTU 4052 Computers, problem solving, and cooperative learning
- MSTU 4133 Cognition and computers
- MSTU 5020 Computer-mediated communication
- MSTU 5555 Technology and the emergence of a global curriculum
Additional courses as prescribed in the program guide for the degree.

Instructional Technology and Media (Ed.D.)
Required and Core Courses

## Required Courses

- MSTU 4031 Programming I
- MSTU 4083 Instructional design of educational technology
- MSTU 5025 Research methods: Educational technology
- MSTU 5031 Programming II

Core Courses

- HUDK 4035 Technology and human development
- MSTU 4022 Telecommunications and distance learning
- MSTU 4024 TV and the development
- MSTU 4036 Hypermedia and education
- MSTU 4133 Cognition and computers
- MSTU 4134 Cognition and
- MSTU 5005
- MSTU 5030
- MSTU 5035
- MSTU 5555

MSIU 5020

Case-based teaching in electronic environments communication Intelligent computerassisted instruction
Technology and metacognition Technology and the emergence of a global curriculum
Additional courses as prescribed in the program guide for the degree.

## Doctoral Certification Process

The doctoral certification process for CCTE students is comprised of three steps:

1. An integrative question (one question) that the student answers in writing during the regular Certification Exam session that is scheduled by the Teachers College Office of Doctoral Studies. This is an integrative question about a currently prominent educational technology topic that can be addressed using material from a variety of CCTE Core Courses and readings. (20 points in Teachers College courses are required after taking the written examination for the first time).
2. A literature review or critical assessment of scholarship (a paper of approximately 30 pages, double-spaced) related to what is planned for the dissertation (this paper provides a head start on the literature review section of the dissertation). This paper is graded by the faculty advisor. Approved papers are archived and generally available to others for future reference.
3. A certification project that is a smaller scale version of what might be done in the dissertation, i.e., a project or pilot study that leads to the dissertation project.
The 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.
b. Prepare the project.
c. Write a project report (around 30 pages). This is graded by the respective student's faculty advisor.

When a faculty advisor certifies that the integrative question portion, the literature review paper, and the certification project have all been completed successfully, then the student is ready to be recommended for certification.

## 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) Professor Black and faculty. 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: $\$ 25$.

MSTU 4005. Equity, ethical, and social issues in educational technology (3) Professor 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: $\$ 25$.

## 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: $\$ 25$.

## MSTU 4010. Theories of communication

 (2-3)Professor 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. Film as art: Introductory (2-3) Professor Akrami. Film as 20th century art, emphasizing form and style. Analysis of fea-ture-length and short films of different nations, styles, themes, and genres. No previous experience in film analysis needed. Special fee: $\$ 50$.

MSTU 4016. The history of communication (3) Professor 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: $\$ 50$.

## MSTU 4018. Design and communication

 in modern culture (3)Professor McClintock. 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: $\$ 25$.

MSTU 4020. Social and communicative aspects of the internet (3)

MSTU 4022. Telecommunications and distance learning (3)
Professor Taylor. 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: $\$ 25$.

## MSTU 4023. Cinema as cross-cultural

 communication (3)Dr. Akrami. Analyzes how films explore culture. Discussion of the film as well as the cultural messages portrayed. Special fee: $\$ 50$.

MSTU 4024. Television and the development of youth (3)
Professor Vasuderan. A comprehensive survey of the socializing and educational effects of television viewing during childhood and adolescence. Within a developmental framework, emphasis is placed on reviewing and critiquing research involving the effects of both formal features of television (e.g., cuts, pans, pace) and the various types of television programs on viewers' comprehension, behavior, attitudes, and beliefs. Special fee: $\$ 50$.

MSTU 4028. 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: $\$ 25$.

## MSTU 4029. Managing educational

 technology resources (3)Professor Terrill. 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: $\$ 50$.

## MSTU 4030. Computer applications

 in education (3)Ms. Kieran-Greenbush. 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: $\$ 50$.

MSTU 4031. Programming I (4)
Mr. Campbell and Ms. Sosulski. Communicating with computers and humans through programs.

## Mathematics, Science, and Technology

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. Co-requisite: MSTU 4032. Special fee: $\$ 50$.

MSTU 4032. Programming I laboratory (0) Mr. Campbell and Ms. Sosulski. Co-requisite: MSTU 4031. Concentrated time to reinforce programming concepts through practice. Lab is led by instructor or teaching assistant. Attendance is mandatory.

MSTU 4035. The computer as an instructional aid (3)
Professor Budin. 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: $\$ 25$.

## MSTU 4036. Hypermedia and education

 (3-4)Ms. Bú Shell, Dr. Kelsey, and Dr. Magni. Introduction to hypermedia products and programming and their role in education. Fourpoint registration is for hypermedia programming lab. Special fee: $\$ 50$.

MSTU 4037. Computers and the uses of information in education (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.

## MSTU 4049. Technologies and literacies

 (2-3)Professor Kleifgen and Dr. Magni. 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: $\$ 25$.

MSTU 4052. Computers, problem solving and cooperative learning (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: $\$ 25$.

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 (3)
Professor Lin. The nature of instructional technology, systems approaches to planning, managing, and evaluating instructional processes and materials. Emphasis is on instructional design. Special fee: $\$ 50$.

MSTU 4085. New technologies for learning (2-3)
Professor Taylor and visiting experts. 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: $\$ 50$.

## MSTU 4086. Text understanding and

 design (3)Professor Black. Covers 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: $\$ 25$.

## MSTU 4133-MSTU 4134. Cognition

 and computersProfessor Black, Ms. Zahner, and Ms. Bai. Ideas about cognition and knowledge representation and how they relate to the use of computers in instruction. The student selects a subject area, learns to represent knowledge from it so that it can be implemented in a computerized instructional system, and uses the knowledge representation to characterize the cognitive prerequisites and consequences of learning to use computers.

- MSTU 4133. Cognition and computers (3) Special fee: $\$ 50$.
- MSTU 4134. Cognition and computers lab (1-3) Permission required. Corequisite: MSTU 4133. Special fee: $\$ 25$.

MSTU 4901-MSTU 4904. Research and independent study (1-6)
Permission required. For master's students. 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 5005. Case-based teaching in electronic environments (3)
Professor Kinzer. This course focuses on the theoretical background related to designing, developing, and using multimedia case methodology in education. Although examples are drawn mainly, though not exclusively, from cases in reading/literacy education, the principles discussed in this course are relevant to a wide range of subject areas. Students are encouraged to examine educational case
methodology within their interest area. Special fee: $\$ 50$.

MSTU 5020. Computer-mediated
communication (3)
Ms. Lin. Analyzes characteristics of such com-puter-mediated communication systems as networked multimedia, electronic mail, bulletin boards, and computer conferencing and situates these systems in the context of the emerging national information infrastructure. Students will participate in online communication systems. Special fee: $\$ 50$.

## MSTU 5030. Intelligent computer-assisted

 instruction (3)Professor Black and Ms. Bai. 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: $\$ 50$.

MSTU 5031. Programming II (3-4)
Mr. Campbell and Ms. Sosulski. Prerequisite:
MSTU 4031 or a solid basic knowledge of programming. Applies programming to significant problems using Java or $\mathrm{C}++$ to construct salient applications. Special fee: $\$ 50$.

## 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: $\$ 25$.

## MSTU 5191-MSTU 5192. Educational video

 production I and II (3-4)Mr. Riccobon. 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: $\$ 75$.

MSTU 5194. Models of human-computer interaction (3-4)
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: $\$ 25$.

MSTU 5201. Fieldwork (1-6)
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 5510. Topical seminar (1-3) 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.

## MSTU 5515. New media teaching and learning (3)

Professor 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: $\$ 50$.

MSTU 5555. Technology and the emergence of a global curriculum (3) Professor Taylor. 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 web site, www.tc.columbia.edu/~global.
Special fee: $\$ 25$.
MSTU 5606-5607. Colloquium on communications and education I and II (3) Professor McClintock. Each week during the academic year, participants in this course will read and discuss important work in the literature of communication. In diverse ways, 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 and Education program and it can serve as the culminating project required for completion of the Master of Education degree in that program. Special fee: $\$ 25$.

MSTU 5814. Work conference (1-2) Faculty. Permission required. Occasional brief conferences convened by Communication, Computing, and Technology on subjects of special interest.

## MSTU 6031. Multimedia educational

 projects (3-6)Professor Taylor. 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: $\$ 75$.

## MSTU 6201-MSTU 6204. Advanced fieldwork (1-6)

Permission required. Extended opportunities for students who have completed MSTU 5200.

MSTU 6401-MSTU 6404. Internship (1-6) 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 Microcomputer 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, and Dr. Halberstam. 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: $\$ 25$.

MSTU 6600. Colloquium in communication, computing, and technology in education (0-3)
Professor Black and 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: $\$ 25$.

MSTU 6901-MSTU 6904. Research and independent study in communication, computing, and technology in education (1-6)
Permission required. For doctoral students. The participating student will propose a program of independent research or project devel-
opment 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) 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, Science AND TECHNOLOGY

## MATHEMATICS EDUCATION

Program Coordinator:
Professor Bruce R. Vogeli
Program Office: (212) 678-3381
Fax:
(212) 678-8129

Email:
tcmath@tc.edu
Web site: www.tc.edu/mst/Mathematics
Preservice Master of Arts degree students should direct admissions and certification questions to Professor Alexander Karp (212) 678-3842, apk16@columbia.edu.

Mathematics Education
(Code: TCA)

## Degrees Offered:

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.)

## 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. Many of these are performed in collaboration with private, public, and parochial schools in the tri-state metropolitan region.

Through funded projects, dissertation research, training and service to national organizations, the faculty and students in mathematics education have helped frame the curriculum and methodology used in the schools of this and other nations. The Program in Mathematics Education emphasizes strong content preparation in a variety of areas of pure and applied mathematics relevant to education.

Master's level offerings in mathematics are appropriate for both preservice and in-service 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.

## Master of Arts

Emphasis is placed on those competencies necessary for effective mathematics teaching as a means of enhancing professional growth of in-service and preservice 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 course work is required. 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, an essay or project, and involve extensive preparation in mathematics education. The College requires that a minimum of 30 points and a 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. A maximum of 30 semester hours of graduate credit may be used from other recognized institutions to reduce the degree requirement. Please refer to the Degree Requirements section of this bulletin for col-lege-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 course work 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, 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 course work 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.

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.

## 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 preservice and in-service 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

## 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 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 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 order to ensure that prospective college teach-
ers understand the history, organization and function of American higher education, all students seeking degrees beyond the Master of Arts should enroll in at least two courses related to college teaching.

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 one to 3 points in at least two semesters. (Please see course lists for descriptions.)

## Master of Arts

Normally students complete 24 points in courses in mathematics and mathematics education including MSTM 4019 (see course list for descriptions) 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 one 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. (See course list for descriptions.)

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. Preservice 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 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 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.

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 math ematics 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. (See course listing for descriptions).

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 theses 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 description). 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. (See course listing for description). Interns will teach college mathematics courses under the supervision of experienced college teachers for a period of at least one semester.

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 theses 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 postsecondary 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. Thesis research may include analytical studies of the process of teaching or of the construction and evaluation of curriculum material, 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 thesis 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 prob-
lems 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)
Professor Vogeli. 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 4025. Teaching computer mathematics (3)
Faculty. A review of teaching methods and curricular innovations in computing and computer mathematics.
*MSTM 4026. Teaching applied mathematics (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. Problems, issues, and methods in the teaching and supervision of elementary school mathematics.

MSTM 5011. Mathematics in the secondary school (3)
Professor Weinberg. 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. Problems, issues, and methods in the college teaching of mathematics.
*MSTM 5020. Mathematics and multicultural education (3)
Professor Walker. Survey of mathematical topics and methods appropriate for multicultural and bilingual programs.

MSTM 5022. Mathematics curriculum development (3)
Professor Vogeli. Principles, strategies, and techniques for curriculum development and
textbook preparation in mathematics.
MSTM 5023. Problem solving (3)
Professor Karp. Theories and methods of mathematical problem solving with applications to classroom instruction.

MSTM 5061. Evaluation in mathematics education (3)
Professor Karp. Theories and methods of evaluating pupils and programs in the cognitive and affective domains.

MSTM 5520. Seminar in the college teaching of mathematics (3) Professor Vogeli. Current issues in undergraduate mathematics. Examination of relations between elementary and advanced mathematics.

## 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)
Faculty. Primes, composites, divisibility and factorization, congruence, historical topics.

MSTM 4032. Mathematical models in the behavioral sciences (3)
Dr. Pollak. Design and development of mathematical models of human behavior, including social, political, management, and defense models.

MSTM 4034. Exploring secondary school mathematics (2-3)
Professor Karp. Designed for students who are preparing to teach in secondary school. It examines the mathematical content of the advanced secondary school mathematics course and traces the development and application of fundamental ideas in mathematics. Considerable attention is devoted to problem solving.

MSTM 4036. Discrete mathematics (3) Dr. Pollak. Discrete mathematics, combinatorics, graph theory.

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 (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. Propositional and predicate calculi, set theory, axiomatics, order types, and the linear continuum.

MSTM 5032. Topics in geometry/topology (3) Professor Karp and Dr. Smith. Foundation of geometry/topology. Emphasis upon the relationship between topology and geometry and other mathematical areas.

MSTM 5033. Topics in algebra (3)
Dr. Smith. Groups, rings, fields. Doctoral students should register for MSTM 6033.

MSTM 5034. Topics in analysis (3)
Dr. Smith. Real or complex functions and their properties. Doctoral students should register for MSTM 6034.

MSTM 5035. Mathematical models in the natural sciences (3)
Dr. Pollak. Simulation, information theory and coding, stochastic models, probabilistic systems, simple harmonic motion.
*MSTM 5037. History of mathematics (3) Professor Karp. Historical development of major ideas in mathematics. Contributions of noteworthy mathematicians. Analysis of mathematical classics.

MSTM 5038. Topics in mathematical logic (3)
Faculty. Goedel's completion theorem, 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 nor mal distribution and its applications. Analysis of variance and regression. Doctoral students should register for MSTM 6126.

MSTM 6030. Advanced topics in probability theory (3)
Dr. Landau. Open only to doctoral students.
Emphasis on proof and advanced applications.
MSTM 6033. Advanced topics in algebra (3)
Professor Vogeli. Open only to doctoral students. Advanced study of groups, rings, and fields.

MSTM 6034. Advanced topics in analysis (3)
Dr. Landau. Open only to doctoral students.
Advanced study of real or complex functions.
MSTM 6126. Advanced topics in the mathematical foundations of statistics (3) Faculty. Open only to doctoral students. Prerequisite: MSTM 5030 or MSTM 6030. Advanced topics including hypothesis testing distribution theory and analysis of variance and regression.

## Mathematics, Science, AND TECHNOLOGY

## Preservice Mathematics Teacher Education

*MSTM 4005. Teaching mathematics in diverse cultures (1-3)
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 (3)
Faculty. Content, methods, and instructional models for teaching exceptional students, including LED, LD and MT students.

MSTM 4760. Student teaching in mathematics (4)
Professor Weinberg. 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)

Professor Walker. Problems, issues, and methods in the teaching and supervision of elementary school mathematics.

MSTM 5011. Mathematics in the secondary school (3)
Professor Karp. Problems, issues, and methods in the teaching and supervision of secondary school mathematics. Includes field experiences. Required for preservice students.

MSTM 5061. Evaluation in mathematics education (3)
Faculty. Theory and methods of evaluating pupils and programs in the cognitive and affective domains.

MSTM 5264. Guided supervision of student teaching in mathematics (2) Professor Karp. 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)
Permission required. Supervised intern service in a variety of field settings including classroom teaching at various levels, supervision,
curriculum development, and in-service education.

MSTM 6500-MSTM 6501. Research seminar in mathematics education (1-3) Professors Karp and Walker. Permission required. Research oriented seminars dealing with a variety of issues and leading to preparation of preliminary proposals for the doctoral dissertation. Required for doctoral students.

MSTM 6901. Research and independent study in mathematics education (1-6) 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 (1-3)
Professors Vogeli and Karp. Development of final doctoral dissertation proposals and presentation of proposals for departmental review.

MSTM 8900. Dissertation advisement in mathematics education (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.

MSTM 9900. Research and independent study in mathematics education (1) Permission required. Open to postdoctoral students accepted for study at Teachers College.

## SCIENCE <br> EDUCATION

Program Coordinator:
Professor Keith Sheppard
Program Office:
(212) 678-8174
Fax:
(212) 678-8145
Email:
tcscience@tc.edu
Web site: www.tc.edu/mst/Science

Preservice Science Education M.A. applicants may refer admissions questions to
Professor Keith Sheppard (212) 678-3425, sheppard@tc.edu.
Science Education
(Codes)
TCB Science Education (Ph.D.)
TCE Elementary School Science Education (M.A., M.S., Ed.M., Ed.D.)

TCH Secondary School Science Education (M.A., M.S., Ed.M., Ed.D.)

TCK Secondary School Science Education Teaching Biology (M.A.)
TCL Secondary School Science Education Teaching Chemistry (M.A.)
TCM Secondary School Science Education Teaching Earth Science (M.A.)
TCN Secondary School Science Education Teaching Physics (M.A.)
TCX Supervision in Science Education (M.A., M.S., Ed.M., Ed.D.)

## Degrees Offered:

Master of Arts (M.A.)
Master of Science (M.S.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## Program Description:

Throughout its long and distinguished history, the Science Education Program has stressed the preparation of leaders in education. These leaders are successful scholars in their discipline, as well as theoretically and practically based educators. The faculty and staff are committed to the idea of leadership training through a variety of courses, workshops, and research experiences. Many of these are performed in collaboration with private, public, and parochial schools, informal science centers (i.e., museums, outdoor education, etc.) and community-based organizations in the tri-state metropolitan region.

Through funded projects, dissertation research, training, and service to national teacher organizations, the faculty and students in science education have helped to frame the curriculum and methodology used in the schools of this and other nations. Science
courses are organized around a global systems perspective so that resources, natural phenomena, and the human impact on nature can be investigated and translated into new science curricula.

Master's level offerings in science content are coordinated with methodology and supervision appropriate for both preservice and in-service 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 science but who do not wish to earn a degree in these areas.

## 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 should apply to the M.A. degree program. Applicants should note that the M.A. major in Elementary School Science Education does not lead to certification. 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.

## 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.

A minimum of 36 points of course work is required, plus a Master's Project in the final semester. (The in-service program is a 34 point program.) Courses taken in this and other departments of Teachers College in the sciences, science education, and professional education to meet individual needs are supplemented by courses taken in other Faculties of Columbia University. No course work may be transferred from other institutions as part of this 36 -point requirement. Only 8 points earned in this Department as a non-degree student may be included in the 36 . Student teaching may not be completed before matriculation. Emphasis is placed on enhancement of science content mastery through appropriate graduate course work either in the candidate's discipline or to increase the breadth of knowledge in other science disci-
plines at Teachers College and elsewhere within Columbia University. Appropriate allocation of professional education courses is recommended and is required to meet New York State certification requirements. A minimum of $9-12$ points in the breadth of science content, with sufficient depth in one area of specialization to communicate content effectively, is required. Also, 9-12 points of general professional education are required. Students must complete 6 points of science education/professional science competencies courses, the remaining points to be taken in electives determined in consultation with an advisor.

For preservice candidates, i.e., those who intend to fulfill the requirements of New York State for 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.

Applicants should note that the M.A. option in Elementary School Science Education does not lead to certification.

Other requirements that must be met before graduation include completion of 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.

Preservice Science Education M.A. applicants may refer admissions questions to Professor Keith Sheppard (212) 678-3425, sheppard@tc.columbia.edu.

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 of Science and <br> 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 course work and a master's paper (see below).

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 course work than the Ed.M. degree, while the Ed.M. degree requires more inten-
sive 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 educators 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 master's level may be applied toward the Ed.D.

## 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 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 a remaining $12-15$ 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, however, 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.

## MATHEMATICS, SCIENCE,

 and TechnologyThe latter may be a computer-level simulation or theoretical model of scientific phenomena. 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 staff. It must be approved by a full-time member of this staff 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 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 col-lege-wide degree requirements but will remain in the Departmental files.

## 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 course work 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 scholar-practitioner.

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 course work 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.

## 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 bulletin Requirements for the Degree of Doctor of Education, 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 your 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. No more than 9 points will be credited. In most cases these courses will be taken in the Graduate Faculties.

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, Felicia Moore, Ann Rivet and Keith Sheppard.

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)Faculty. Foundations of science education. Planning, assessment, and management of instruction. Required of preservice science students.

MSTC 4007. Teaching and learning science in urban settings I (3)
Faculty. Drawing from the scholarship in policy, curriculum, and teaching, this course explores the 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, and (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. This course provides students with both researchbased and field-based experiences.

MSTC 4008. Teaching and learning science in urban settings II (3)
Faculty. MSTC 4008 will continue and draw on discussions begun in Urban Science Education I (MSTC 4007). This course will use cultural lenses and community perspectives to explore challenges and successes in teaching science well with students in public urban settings. We will explore the issues involved in public school science education, from school and classroom vantage points, practices that represent the best of what we know about science teaching and learning, and how these play themselves out in urban education environments.

MSTC 4040. Science in childhood
education (2-3)
Faculty. This is an integrated lecture/laboratory course. This course provides an introduction to the creation of science curriculum and instruction that attend 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 4042. Multicultural science education as content and pedagogy (3) Faculty. In this course students will explore multicultural science education in terms of both content and pedagogy. One of the most significant problems with bringing multiculturalism into the science classroom is that it is often taught as one distinct and often separate component of the science curriculum. This course challenges this commonly used practice. The course will explore the intersections of science and society and the impact this has on standard K-12 science curriculum and teaching practices.

## MSTC 5040. Science curriculum

 improvement in the elementary schoolFaculty. 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 (3) Faculty. MSTC 5042 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)Faculty. 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. It is designed for and is intended to provide a foundation for several key dimensions of curriculum, including exploration of the following questions: What is curriculum? What is pedagogy? How is the enactment of curriculum/pedagogy influenced by theoretical underpinnings (and one's assumptions about what teaching, learning, subject matter, and context are)? What is the relationship between curriculum and pedagogy? What roles do teachers, administrators, policy makers, and curriculum writers play in what actually happens in science class?

MSTC 6502. History of science education (3) Faculty. 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 in 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) Faculty. 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 secondary school curricula, stressing laboratory activity.

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) Faculty. 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 protozoa.

MSTC 4052. Plant biology (2-3)
Faculty. Introduction to plant physiological ecology with an emphasis on global systems. Laboratory sessions to be announced.

MSTC 4054. Human anatomy and physiology (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. 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) Faculty. 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: chemical composition and the elements; chemical change, the acids, activity; the nature of matter; the structure of the atom and bonding.

MSTC 4060. Concepts in chemistry II (3) Faculty. 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) Faculty. Exploration of physics themes of molecules and molecular kinetic theory, heat, mechanics, waves, electricity and magnetism, modern physics. Of particular interest to introductory physics, physical science and general science teachers.

MSTC 4076. Concepts in physics II (3) Faculty. 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 masters 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. Biochemistry and cell biology (2-4)
Professor Anderson. Prerequisite: organic chemistry. Modern advances in biochemistry related to cell function. Additional project for 4th point.

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.

MSTC 5152. Biochemistry and cell biology laboratory (1-3)
Faculty. Permission required. Recommended: MSTC 5052. Laboratory techniques used in biochemical cellular biology, emphasizing experiments that can be adapted for secondary school biology courses.

## Field-Based Courses

MSTC 4363. Introduction to science education practice (2)
Faculty. Corequisite: MSTC 4000. Directed field experiences and seminars explore school environments and teaching strategies.

MSTC 4761. Student teaching in science (6)
Faculty. 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 (2)
Faculty. Permission required. Open only to doc-
toral 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 (1-6)
Faculty. 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 (2-3) 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 (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)
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)
Development of doctoral dissertation proposals and presentation of proposals for departmental review.

## MSTC 8901. Dissertation advisement

 in science education (0)Individual advisement on doctoral dissertations. Fee: to equal 3 points at current tuition rate for each term. For requirements, see section in cata$\log$ on Continuous Registration for Ed.D./Ph.D. degrees.

MSTC 9901. Research and independent study in science education (1 or more) Permission required. Open to postdoctoral students accepted for study at Teachers College.

# Organization and Leadership 

## PROGRAMS:

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[^2]
## 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, who consult to organizations and institutions, and who teach leadership, administration, education policy, politics, organizational behavior learning and 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:

W. Warner Burke
(Social-Organizational Psychology)
Jeffrey Henig (Politics and Education)
Jay P. Heubert (Education Leadership)
Pearl Rock Kane (Education Leadership)
L. Lee Knefelkamp
(Social-Organizational Psychology)
Henry M. Levin (Education Leadership)
Victoria J. Marsick
(Adult Learning and Leadership)
Anna Neumann
(Higher and Postsecondary Education)
Craig E. Richards (Education Leadership)
Carolyn Riehl (Education Leadership)
Elaine La Monica Rigolosi (Nurse Executive)
Thomas Sobol (Emeritus)

## PROFESSORS OF PRACTICE:

Arlene Ackerman (Education Leadership)
Michael Rebell (Education Leadership)

## ADJUNCT PROFESSORS:

Stephen D. Brookfield
(Adult Learning and Leadership)
Patricia Cranton
(Adult Learning and Leadership) Laurent Daloz
(Adult Learning and Leadership)
Keville C. Frederickson (Nurse Executive)
Joseph N. Hankin
(Higher and Postsecondary Education)

Ruud van der Veen
(Adult Learning and Leadership)
Rita Reis Wieczorek (Nurse Executive)

## ASSOCIATE PROFESSORS:

Gregory Anderson
(Higher and Postsecondary Education)
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(Higher and Postsecondary Education)
Caryn J. Block
(Social-Organizational Psychology)
Madhabi Chatterji
(Education Leadership)
Peter T. Coleman
(Social-Organizational Psychology)
Kevin Dougherty
(Higher and Postsecondary Education)
Eleanor Drago-Severson
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Debra A. Noumair
(Social-Organizational Psychology)
Elissa Perry
(Social-Organizational Psychology)
Patricia Raskin
(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:
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(Social-Organizational Psychology)
Gene Boccialetti
(Social-Organizational Psychology)
Cynthia Caroselli (Nurse Executive)
David X. Cheng (Education Leadership)
Celeste Coruzzi
(Social-Organizational Psychology)
Joseph D'Oronzio (Nurse Executive)
Philip E. Fey (Adult Learning and Leadership)
Charles Fowler (Education Leadership)
Kathleen Gialanella (Nurse Executive)
William Johnson (Education Leadership)
David L. Levinson
(Higher and Postsecondary Education)
Stacey E. Lutz
(Social-Organizational Psychology)
Daryll Mattingly (Education Leadership)
Gibran Majdalany (Education Leadership)
Sheila O'Shea Melli (Nurse Executive)
Jonathan S. Rosenberg (Education Leadership)
Vincent Rudan (Nurse Executive)
William Shine (Education Leadership) Marvin Sontag
(Adult Learning and Leadership/Nurse
Executive/Education Leadership)

## ASSISTANT PROFESSORS:

Luis Huerta (Education Leadership)
Janice Robinson
(Higher and Postsecondary Education)

## ADJUNCT ASSISTANT PROFESSORS:

Timothy Breslin (Education Leadership)
David L. Buckner
(Social-Organizational Psychology)
Tom Buffett (Education Leadership)
Gina Buontempo
(Social Organizational Psychology)
Monica Christensen
(Higher and Postsecondary Education)
Susan Ellis (Education Leadership)
Virginia G. Gonzalez
(Adult Learning and Leadership)
G. Kennedy Greene (Education Leadership)

Catherine Guerriero (Politics and Education)
Brian Hall (Adult Learning and Leadership)
Elaine Kanas (Education Leadership)
Sharon Lamm (Adult Learning and Leadership)
James Langlois (Education Leadership)
Dianna Lindsay (Education Leadership)
Barbara Macaulay
(Adult Learning and Leadership)
Laura McKenna (Politics and Education)
Kim Mendez (Nurse Executive)
Susan Meyer (Adult Learning and Leadership)
Mark Neustadt (Education Leadership)
Joanna Nicholson (Education Leadership)
Laurie Nisco (Social-Organizational Psychology)
Gabriela Oldham (Education Leadership)
Judith O'Neil (Adult Learning and Leadership)

Paul O'Neill (Education Leadership)
Judith Parker (Adult Learning and Leadership)
Brian Perkins (Education Leadership)
Thomas Rock (Higher and Postsecondary Education) Svetlana T. Shmulyian
(Social-Organizational Psychology)
Elana Sigall (Education Leadership)
Franceska Blake Smith
(Adult Learning and Leadership)
Ross Tartell (Social-Organizational Psychology)
Marie P. Volpe (Adult Learning and Leadership)
Saul Yanofsky (Education Leadership)

## LECTURERS:

Jeanne E. Bitterman
(Adult Learning and Leadership)
Sarah Brazaitis (Social-Organizational Psychology)
Beth Fisher-Yoshida
(Social Organizational Psychology)
Judith Glazer-Raymo
(Higher and Postsecondary Education)
Miriam Javitch (Social-Organizational Psychology)
Arthur M. Langer
(Higher and Postsecondary Education
and Adult Learning and Leadership)
Terrence Maltbia
(Adult Learning and Leadership
and Education Leadership)
Robert Monson (Education Leadership)

## INSTRUCTORS:

Michel Alhadeff
(Adult Learning and Leadership)
Karolyn Belcher (Education Leadership)
Gina Buontempo
(Social-Organizational Psychology)
Brent Copen
Patrick Hyland
(Social-Organizational Psychology)
Riva Kadar (Higher and Postsecondary Education)
Michelle Neuman (Politics and Education)
Jill Paine (Social-Organizational Psychology)
Mary Price (Nurse Executive)
Kent Strong (Social-Organizational Psychology)
Megan Whalen (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 Autumn 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 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 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 submit ting a Program Plan.
I. Students who have not been recommended for certification (as defined above), can apply for a Certificate of Equivalency provided they meet college requirements for the Certificate of Equivalency or take an 8900 level course.
J. 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 under take additional coursework, as specified by faculty advisor, Program Coordinator, and/or Department Chair.
6. Petitions for extensions must be filed within 6 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 2 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 methods education (3)
Professors Knefelkemp, Neumann, and Shipps. This course meets a departmental requirement for an introductory course on understanding research across a wide spectrum of educational settings. Basic concepts of research methods and theories of research are introduced so that students can comprehend and critique educa-
tion research and evaluation. Methods discussed include both qualitative and quantitative approaches to research, such as surveys, case studies, ethnography, participant observations, interviews, and oral histories.

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)
Professor Perry. Overview of alternative methods of behavioral research and their relative strengths and limitations. Application of methodological application of principles in order to read and to evaluate social science research and to learn how to conduct research.

ORLJ 5018. Using survey research in organizational consulting (3) Professor Westaby. Prerequisite: ORLJ 4009 and some statistics knowledge. This course illustrates how to conduct survey research for organizational change initatives. 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.

## Adult Learning AND LEADERSHIP

The Adult Learning and Leadership area of study includes the following programs: Adult Learning and Leadership; Adult Education Guided Intensive Study (AEGIS).

## ADULT LEARNING AND LEADERSHIP

Program Coordinator:
Professor Victoria J. Marsick
$\begin{array}{lc}\text { Program Office: } & \text { (212) 678-3760 } \\ \text { Program Email: } \\ \text { al\&l@tc.edu } \\ \text { Web site: www.tc.edu/o\&l/AdultEd }\end{array}$
Adult Learning and Leadership
(Code: TDK)

## Degrees Offered:

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. We train students in the use of collaborative action technologies-action research, action learning, action science and collaborative inquiry-to engage adults, organizations and institutions in co-inquiry and change in programs, organizations, institutions, and other learning communities.

Graduates thus help adults to participate more fully, democratically, and successfully in organizations, institutions, communities and societyand conversely, to help these social and organizational units to rethink issues of social equity and valuing of diversity.

The Adult Learning and Leadership Program offers two concentrations: Adult Education and Organizational Learning, or Healthcare Human Resources. The intellectual framework of the two concentrations 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.

## Concentration in Adult Education

 and Organizational LearningThe concentration in Adult Education and Organizational Learning 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.

For the concentration in Adult Education and Organizational Learning, 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 sys-tems-level learning. The concentration 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;
- Designers, planners, managers, and developers who are innovating with new delivery models; and
- Researchers and evaluators of cutting-edge adult education practices.


## Concentration in Healthcare Human Resources

 The concentration in Healthcare Human Resources appeals to professionals in nursing, social work, nutrition, extended nursing care, law, and medicine, who are seeking leadership, and learning positions. The healthcare human resource educator or manager is a teacher, leader, facilitator, collaborator, creator, and reform artist who must fit professional responsibilities with societal changes, governmental regulations, consumer needs, and healthcare delivery. Healthcare delivery must be qualitatively and economically sound.Healthcare, from the non-profit or for-profit sectors, is one of the largest if not the largest consumer of the gross national product in this country. There are unlimited avenues in healthcare delivery that employ various peo-ple-professional and non-professional as well as those technically trained. Human resource education and management of these staff members become the responsibility of professionals who have education in some area of healthcare practice due to the unique structure and needs of healthcare delivery. They must be identified with, as well as understand, healthcare; they must be able to lead and educate.

The purpose of the concentration in Healthcare Human Resources is premised on the notion that professionals in the areas of healthcare delivery must also be educated in the areas of Adult Learning and Leadership and the field of human resources in healthcare organizations. This leader must be astute across professional domains; the leader must: (a) understand organizational dynamics, (b) be an effective change agent, (c) be a leader and educator, and (d) be a manager of organizational change. These responsibilities require a person to be knowledgeable in their professional domain in healthcare as well as their practice domain with human resources.

## Special Application 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 are not.

If applicants wish, they can meet the academic writing sample 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 stakeholders 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 researchfocused.

The core courses are designed to develop professional capabilities for students in Adult Learning and Leadership in either of the two concentrations (Adult and Organizational Learning or Healthcare Human Resource Development). These core courses prepare students with respect to leadership, strategy and management, adult learning, human resource development, group dynamics and organizational behavior. The required concentration is then tailored to the contextual needs of students in either of the two specializations.

Required core courses can be selected in the area 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):

- ORL 4054 Leadership and management in healthcare organizations
- ORLJ 5005 Leadership and supervision

Strategy and Management (minimum of 3 points):

- ORLA 5025 Ecology of educational planning and management
- ORLD 5054 Strategy development as a learning process in organizations
- Courses available elsewhere at the College or Columbia University.

Adult Learning (minimum of 3 points):

- ORLD 4053 Facilitating adult learning
- ORLD 4800 Workshop: Building a learning community

Human Resource Development
(minimum of 3 points):

- ORL 4011 Personnel management in healthcare organizations
- ORLD $5055 \quad \begin{aligned} & \text { Staff development } \\ & \text { and training }\end{aligned}$
- ORLD 5062 Human resource develop-
ment in organizations
- ORLJ 5003 Human resource management

Group Dynamics (minimum of 3 points):

- ORL 5362 Group dynamics:

A systems perspective

- ORLJ 5017 Small group intervention:

Theory and method
Organizational Behavior (minimum of 3 points):

- ORLA 4010 Introduction to organiza-
tion and change theory in education
- ORLJ 4005 Organizational psychology
- ORLJ 5045 Organizational dynamics and theory

Technology (minimum of 3 points):

- MSTU 4022 Telecommunications,
- MSTU 4030 distance learning
- MSTU 4030 Computer applications
- MSTU 4031 in education
- MSTU 4083 Instructional design of - ORLA 5020 educational technology - ORLA 5020 Information systems for decision making in learning organizations
- ORLN 5013 Informatics in nursing


## Required Core Research Sequence

## (3-18 points)

M.A. (minimum 3 points):

- ORL 5521 Introduction to research
- ORL 4009 methods in education
- ORLJ 4009 Understanding behavioral research

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
- HUDM 4122
- HUDM 5122

Basic concepts in statistics
Probability and statistical inference
Applied regression analysis

- HUDM 5123 Linear models and
- HUDM 5124 Multidimensional scaling and clustering
- HUDM 6026 Statistical treatment of mass data
- HUDM 6122 Multivariate analysis I
- HUDM 6123 Multivariate analysis II
- ITSF 4092 Qualitative research and evaluation in international education
- ITSF 5000 Methods of inquiry: Ethnography and participant observation
- ITSF 5001 Ethnography and participant observation: Structural and interpretive analysis
- ORL 6500 Qualitative research in organizations: Research design
- ORL 6501 Qualitative research in organizations: Data analysis


## Concentration Specific Course Requirements (15-18 points):

Adult Education and Organizational Learning concentrations should choose from:

Adult Development Theory and Applications

- ORLD 4051 How adults learn

Adult Learning Theory and Applications

- ORLD 4050 Introduction to adult and continuing education
- ORLD 5057 Adult learning and education theory and practice

Systems Learning Theory and Applications

- ORLD 5061 The learning organization
- ORLD 5065 The learning society
- ORLD 5550 Research on organizational learning
- ORLD 5819 Workplace Learning Institute

Program Development and Management

- ORLD 4052 Program development: Assessing learning needs and evaluating outcomes
- ORLD 5053 Developing and managing adult learning programs

Conflict Resolution

- ORLJ 5340 Basic practicum in conflict resolution and mediation skills
- ORLJ 6040 Fundamentals of cooperation, conflict resolution and mediation in different institutional contexts
- ORLJ 6350 Advanced practicum in conflict resolution (two terms)

Healthcare Human Resources concentrations should choose from:

Healthcare Law

- ORL 4014 Legal issues in healthcare
- ORL 5551 Ethics for healthcare
- ORLN 4013 Fiscal management of the
nursing organization
Seminar. Clinical teaching
- ORLN 6014 Managing the socially
responsible organization Innovations in nursing management
- ORLN 6514 Marketing nursing programs and services
- ORLN 6522 Policy formation and governance in healthcare


## 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 3 breadth courses ( $2-3$ 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 Main Hall. 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 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: | al\&l@tc.edu |

Web site: www.tc.edu/o\&1/AdultEd
Adult Education Guided Intensive Study (AEGIS)
(Code: TDS)

## Degree Offered:

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 education 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. Course work is completed over a two-year period. A new cohort begins in June of odd years (i.e., 2005, 2007). 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: $\$ 8,500$ per semester for cohort beginning summer 2005. 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.
- Proof of access to a university library.
- 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 begin ning of the program. Applicants who want to be considered for an early admission decision should make sure that their materials are submitted by October 1 of the year preceding the beginning of the program and will be interviewed in November. Applicants submitting materials by January 2nd of the year in which the program begins, will be interviewed in February. The admission deadline is January 2nd. Final admissions decisions are normally made by March of the year in which the program begins.


## Degree Requirements:

AEGIS students must complete 49 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 and complete a dissertation.

## First Year: (22 points)

Summer (Three week session)

- ORLD 6800 Workshop in adult education:

Life history (2)

- ORLD 6902 Pro-seminar in adult
education (3)
- ORLD 6906 Program development (3)


## Fall

- ORLD 6908

Adult education/learning:
Theory and practice (3)

- ORLD 6800 Workshop in adult education:

Literacy/ABE (1)

- ORLD 6918 Introduction to research (3)


## Spring

- ORLD 6800 Workshop in adult education:

The learning society (1)

- ORLD 6903 Qualitative research (3)
- ORLD 6908 Advanced adult education theory (3)

Second Year: (24 points)
Summer (Three week session)

- A\&HF 4061 Introduction to cultural studies (3)
- HUD 4120 Methods of empirical
- ORLD $6800 \quad$ Workshop in adult education:

Workplace learning (1)

## Fall

- A\&HF $4090 \quad$ Philosophies of education (3)
- ORLD 6914 Learning communities I
- ORLD 6918 (Face-to-face) (2)

Spring

- ORLD 6800 Workshop in adult education:

Technology in organizations (1)

- ORLD 6908 Advanced seminar:

Leadership in adult education (3)

- ORLD 6915 Learning communities II
(Virtual) (2)
- ORLD 6918 Advanced research (3)

Third Year: (5 points)
Summer (Three week session)

- ORLD 6800 Workshop in adult education: Capstone (0)
- ORLD 6916 Learning communities III (Face-to-face) (2)
- ORLD 6918 Advanced research (3)


## 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)
Drs. Gonzalez and Langer. Role and perspective changes in adulthood, concepts of maturity , learning theories, personality development, cognitive learning and thinking, creativity, interests and attitudes, motivation, self-concept, 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)
Dr. Fey. 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 4800. Workshop in higher and adult education (1-3)
Faculty. Special topics or events related to the
administration of programs in adult education. Topics change each semester. Open to degree and non-degree students for credit or noncredit.

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 (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 (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 indi-viduation-differentiating one's Self from the collective-will be used as yet another lens through which we can view transformation.

ORLD 4844. Helping adults learn (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 (1-6)

ORLD 5053. Developing and managing adult learning programs (3)
Dr. Fey. 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)
Dr. Meyer and Dr. 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, or 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 the-ory-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)
Professor 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 5550. Research on organizational

 learning (3)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)
Professor Marsick and Dr. Meyer. 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 5900. Research in adult education

 (1-4)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 6550-ORLD 6551. Advanced seminar in adult education (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
Faculty.
ORLD 6900. Research and independent study in adult education (1-6)
Permission required.
ORLD 7500. Dissertation seminar adult education (1)
Permission required. Students should have completed most or all course work (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. Directed Research and Independent Study (students must have an instructor-approved Learning Contract prior to enrolling in any of the following courses).

## ORLD 7900. Directed dissertation

 research (3)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)
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.

## Organization AND LEADERSHIP

## EDUCATION <br> LEADERSHIP PROGRAM

Program Coordinator:
Professor Robert Monson
Program Office: (212) 678-3726/3139
Email:
edleadership@tc.edu
Web site: www.tc.edu/o\&l/EdAdmin
Education Leadership Program
(Code: TAL)

## Degrees Offered:

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

## Program Description

With a nationally recognized faculty and a tradition of national prominence, the Teachers College Education Leadership Program prepares students for careers as practitioners and scholars prepared 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 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, they:

- 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 the nature of policy, political systems, and law, and possess the skills required to shape and influence these systems and their products;
- Understand contemporary management systems, and are able to employ them effectively;
- 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 refine the critical intelligence needed to question what is and develop what might be.


## Special Application <br> Requirements/Information:

Applicants to the Education Leadership program must specify the degree, program name, program code, course of study, and concentration (if applicable) of their choice on the application for admission. Special application requirements include:

- Graduate Record Examination (GRE) is required of applicants to all degree programs in Education Leadership (M.A., Ed.M., Ed.D. and Ph.D.)
- 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 either the M.A. or Ed.M. program in Education Leadership with a course of study in Private School Leadership should have at least three (3) years of teaching experience.

Applicants for the Klingenstein Fellows Program who wish to be considered for acceptance to the master's degree program must submit the Klingenstein Fellows application as well as the Teachers College Application for for Admission. Please send the fellowship application to the Klingenstein office by January 15th and Teachers College application to the Admissions Office by January 15th.

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. Late applications may be considered for admissions the following year.

All master's applications (Ed.M.) in Public School Building Leadership and Public School District Leadership, Private School Leadership, Leadership Policy and Politics, or the M.A. in Education Leadership Studies that are complete and have been received by the Admissions Office by the priority 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 Program offers the following courses of study:

Public School Building Leadership and Public School District Leadership (application code: TAL) (except for Inquiry, which is application code TAQ) (M.A., Ed.M., Ed.D.)

- The Public School Summer Principals Academy (M.A., Ed.M.- Summer cohort program)
- Inquiry in Education Leadership Practice (application code: TAQ) (Ed.D.- Summer/ school-year cohort program)
- School-Year Master's- Public School Building Leadership and Public School District Leadership (Ed.M.- for aspiring school-level leaders)
- School-Year Doctoral- Public School Building Leadership and Public School District Leadership (Ed.D.- for aspiring school-level leaders)

Private School Leadership (application code: TAL) (M.A., Ed.M., Ed.D.)

- School Year Master's- Private School Leadership (M.A., Ed.M.- full-time study and fieldwork- from September to May)
- Leadership Academy- (M.A., Ed.M.Summer cohort program over 18 months)
- School-Year Ed.D. in Education Leadership Studies with a focus in Private School Leadership

Education Leadership Studies (application code: TAL) (M.A., Ed.M., Ed.D., Ph.D.)

- Leadership, Policy and Politics (application code: TAL) (M.A., Ed.M., Ed.D.)
- Education Leadership and Management (application code: TAA) (Dual Degree Program with Columbia Business SchoolEd.D., M.B.A.)

The course of study in Education Leadership Studies prepares students for positions of administrative leadership within the public schools and in public and private organizations that work with public schools, such as not-for-profit organizations, government agencies, education related businesses, and advocacy groups. Completion of the program does not by itself confer certification as School Building Leader and/or

School District Leader in New York State. (Students may make direct application to the New York Office of Teaching Initiatives if they meet New York State requirements.) The curriculum in this concentration spans the learning domains common to all Education Leadership concentrations, but expects students to develop a unique program of study in close consultation with an advisor. Contact Professor Jay Heubert (212) 678-3775.

Students in each concentration pursue a common core of studies in Leading Learning, Management Systems, Organizational Behavior, Policy Analysis and Politics, and Educational Research. The Program faculty establishes the specific course requirements in each concentration. These studies are enriched by specialized work in the student's specific area of interest, drawing on the extensive resources of the faculty in Education Leadership, the Department of Organization and Leadership, Teachers College, Columbia University, and other schools at Columbia University.

Course of Study in Public School and School District Leadership:

The Public School Building Leadership and Public 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 M.A. (summer only) and Ed.M. (summer and school year) lead to New York State School Building Leader certification. The Ed.D. (Inquiry and school year) lead to New York State School District Leader certification. Students completing the Ed.D. however, can satisfy School Building Leader requirements as they work towards Public School District Leader certification. The course of study in Public School and Building Pulic School District Leadership prepares committed women and men for lives of leadership and service in public education. Its chief objectives 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, management systems, organizational behavior, and policy analysis. Students complete intensive internships and conduct research, usually in field settings of the student's choice. Instructionally, the concentration offers innovative case-based, problem-based, and field-based learning experiences. Offerings reflect both the National Policy Board for Educational Administration's NCATE/ELCC and New York 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.

Candidates should have at least three years of teaching and/or administrative experience in the public schools.

The Course of Study in Public School Building Leadership and Public School District Leadership offers four concentrations: - The Public School Summer Principals Academy (application code: TAL) (M.A., Ed.M.- Summer cohort program)

- Inquiry in Education Leadership Practice (application code: TAQ) (Ed.D.- Summer/ school-year cohort program)
- School-Year Master's- Public School Building Leadership and Public School District Leadership (application code: TAL) (Ed.M. -for aspiring school-level leaders)
- School-Year Doctoral- Public School Building Leadership and Public School District Leadership (application code: TAL) (Ed.D.- for aspiring district level leaders)


## The Public Schools Summer Principals

 Academy (application code: TAL) (M.A., Ed.M.-Summer cohort program) The Public Schools Summer Principals Academy is structured for a diverse group of talented educators whose obligations preclude them from attending courses during the traditional 15 week semester or for whom distance is a barrier to attendance. The cohort program allows students to balance full-time employment with graduate study. Aspiring school leaders pursue coursework and skill development over two summers and undertake sitebased research projects and internships at their schools of employment during the intervening year. The program is 32 points, is completed intwo consecutive summers, and leads to an M.A. or Ed.M. and School Building leadership certification in New York State (New York has reciprocity with most states.) Housing is available for those who require it.

The Public Schools Summer Principals Academy 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 field-based 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, casestudies, and offers mutiple 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 the Public School Summer Principals Academy need to 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 summer courses of study: summer immersion experiences for aspiring public school principals, a 2 point action research course that includes a mid-year skills development workshop, 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, 9:00-4:00. Introduction to school leadership is offered in the morning and Adult Development in the afternoon for the first three weeks. Mediation and conflict resolution is offered in the morning and supervision in the afternoon during the second three weeks. Eight credits occur via 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 will be on-going representations of student accomplishment. The academic program is concluded with a group Capstone Project. All faculty teaching in the program will be proficient in the use of e-portfolios and will contribute to student progress through them by evaluating their work, providing additional perspectives, pointing out opportunities for personal and professional growth and mentoring.

## Curriculum:

## Summer I Session

ORLA 4001. Introduction to school leadership and decision making (3)
Professors Richards and Maltbia. This course uses the literature on decision-making theory in combination with intensive case-study analysis in groups to explore how decision-making styles and strategies affect problem-based decisionmaking in innovative public school settings.

## ORLA 5029 Supervision of teaching

 and learning (3)Professor Monson. 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 5532. Program development: Teaching, learning and assessment (3)

Professor Monson. This course is an introduction to child development theory, curriculum design, and student assessment. The purpose of the course is to develop, from a leadership perspective, a solid knowledge of the linkages between the best thinking on child development, its influence over good curriculum design, and delivery.

## ORLJ 5340. Basic practicum in conflict

 resolution (3)Faculty. This course is developed and staffed by Teachers College Center for Cooperation and Conflict Resolution. The purpose of the course is to provide aspiring principals with a brief theoretical background in the group dynamics, mediation, and conflict resolution. The course emphasizes experiential and reflective learning.

## Winter Session

ORLA 5530-02. Leadership and action research practicum (2)
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 knowledge-driven strategies of school improvement.

## ORLA 6460. Internship in school

leadership (3)
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 450 hours approximately (12-15 hours per week) of supervised field work in a public school.

## Summer II Session

ORLA 4033. Leadership and institutional analysis: School law ethics (3)
Professors Heubert and Sobol. 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 5025. The ecology of data-driven

 leadership (3)Richards. This course relies upon systems theory (Senge 1990; Richardson 1997; Baker \& Richards) and its application to school systems. The course teaches prospective leaders the use of data-bases of various kinds to pursue a systematic inquiry in the ecology of the school. It explores various approaches to data mining, model building and ultimately the "structure of improvisational leadership". The course teaches students how to distinguish the different purposes for which data can be used and misused. The course relies heavily on the use of cases, simulations and exercises including those with complex feedback systems.

ORLA 4025. Resource allocation for student achievement (3)
Professor Greene. This course emphasizes the skills of school budgeting and facilities management, personnel allocations, and grant writing. Students analyze an actual school budget, make a 3 year budget request, and reassign faculty and support staff in an effort to improve student achievement.

## Ongoing

ORLA 6020. The Pro-seminar in leadership (3)
This Friday seminar course is topical and brings in guest speakers, exemplary practitioners, researchers and policy makers from academia and the field to share with the cohort their experience, research and insights about effective leadership practices. The central theme of the Pro-Seminar is the development of personal mastery and includes extensive development in emotional intelligence as it relates to leadership capacity. The course meets on Fridays over two summers and includes professional development during the intervening school year.

## Table 1: Two-Summer Curriculum Schedule

The Table below provides a summary of the course sequence for prospective students. Students take four courses ( 12 points), their first summer, two courses ( 5 points) during the academic year (listed under winter), and another 12 points during their second summer. The Pro-seminar in leadership (ORLA 6020-3 points), runs throughout the length of the program and completes the 32 points

| SUMMER 1 | WINTER | SUMMER 2 |
| :---: | :---: | :---: |
| Introduction to <br> School Leadership <br> and Decision Making | Leadership Action <br> Research Practicum | Resource Allocation for <br> Student Achievement |
| School Leadership for <br> Adult Development | School Leadership Internship <br> (450 hours) | School Law and Ethics |

For more information on the Summer Principals Academy, please contact
Thomas Haferd at (212) 678-3727 or haferd@tc.edu.


## INQUIRY IN EDUCATION <br> LEADERSHIP PRACTICE

Program Director:
Professor Arlene Ackerman
Program Office: (212) 678-3751
Email:
TCinquiry@columbia.edu
Web site: www.inquiry.tc.columbia.edu
Inquiry in Education Leadership Practice (Code: TAQ)

## Degree Offered:

Doctor of Education (Ed.D.)

## Special Application Requirements/Information:

Inquiry in Education Leadership Practice requirements are listed below:

- Please use the code TAQ when applying for the Inquiry in Education Leadership Practice.
- Graduate Record Examination (GRE).
- Applicants to the Ed.D. program must have completed 40 graduate credits with a B average or better to be eligible for consideration.
- All degree applicants are required to have access to a computer. Doctoral students are encouraged to purchase a laptop computer.
- Prospective students are encouraged to apply early. Contact Professor Arlene Ackerman for more information.


## Program Description:

Inquiry offers practicing school administrators and other education professionals an opportunity to complete a rigorous doctoral program while continuing to practice. It is dedicated to preparing committed men and women for lives of leadership and service in educational institutions of all kinds. Its objectives are to:

- Strengthen 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
- Create and sustain a learning community committed to continuous learning and mutual support.

The program was conceived in 1984 by Professor Frank Smith, who continued to
direct it until 1996. From 1996-2006, it was led by Professor Thomas Sobol. Students are typically mid-career education professionals who aspire to leadership roles in a wide variety of education or education-related organizations. Admissions are based on a holistic assessment of a candidate's promise for academic and professional success. Care is taken to admit annually a cohort of students reflecting a diversity of professional, ethnic, cultural, and geographic backgrounds.

Students pursue a coherent curriculum grounded in practice and combining the best of theoretical and clinical studies. The curriculum features four chief areas of study: leading learning, organizational behavior, policy analysis, and management science. It also includes courses in education law, the history of American education, curriculum and teaching, conflict resolution and mediation, and ethical issues, as well as the research skills needed to complete the dissertation.

Inquiry students are typically mature and experienced, and require a style of teaching and learning that honors these characteristics. Students are asked to assume significant responsibility for their own learning, both individually and as a group. Faculty are encouraged to make extensive use of case studies linking theory to practice, and to employ new learning technologies to good effect. Students and faculty alike are urged to draw upon the diversity of the cohort as a rich source of learning experience.

Inquiry is offered as a sequence of courses meeting on concentrated long weekends and summer sessions over a period of two calendar years. More specifically, classes are held during 3 different weekends in the fall and 3 different weekends in the spring, and the whole month of July over a period of two and half years. Students proceed through the program as a cohort, taking the same courses and meeting the same academic requirements. (Individual applications of the course work vary with the interests of the student.) Small group and individual work undertaken at and between sessions supplements the class meetings. Increasingly, electronic technology is used to promote communication and sustain community between meetings.

## Degree Requirements:

Students must meet the same requirements, at the same high standards of performance, as students in the conventional doctoral program. Inquiry students must complete the Education Leadership Program's Ed.D. requirements. Essentially, students must earn 90 points of academic credit, complete a field
experience requirement, pass a certification examination, and successfully defend a doctoral dissertation. Students are expected to have completed forty units of approved graduate credit at Teachers College or elsewhere prior to enrollment in the program. They then earn the remaining required fifty units, complete the field experience requirement, the two-part advancement to candidacy process, and begin planning the dissertation within a period of two calendar years. Most students complete the dissertation some time within approximately two academic years.

For additional program information please visit http://inquiry.tc.columbia.edu

School-Year Master's- Public School Building Leadership and Public School District Leadership (application code: TAL) (Ed.M.for aspiring school-level leaders)

This 60 -point university-based concentration combines the practical and theoretical study of organizational behavior, leading learning, management science and educational policy and politics, with attention to four cross-cutting themes: diversity, technology, leadership and organizational change.

The School-Year Ed.M.- Public School Building Leadership and Public School District Leadership has a series of required courses, organized around its four primary areas: leading learning (creating a learning community, supervision of teaching and learning, developing and transforming education); organizational behavior (organizational behavior and change, and a course in group dynamics or conflict resolution); management science (school business administration and ecology of educational planning and management); policy and politics (one of three possible law courses and one topical policy course).

In addition, to develop their research skills for inquiry and reflection in educational practice, all students are to complete an overview research methods course and either action research or evaluation research methods. To develop their ethical foundations, students take a required course on ethical issues in educational leadership and one of three possible history of education courses. Finally, to broaden their foundation in education, they may select from among three possible courses in philosophy, technology, or psychology.

Though many courses are prescribed, students have flexibility and opportunities to tailor the course of study to individual interests. Most courses are taught by the core program faculty. Successful candidates can earn the New York

State certification as a School Building Leader (SBL).

The courses and field experiences are under review for 2007-2008. Currently the course sequence is as follows:

Core Courses

- ORLA 4049 Creating a learning community (3)
- ORLA 5029 Supervision of teaching and learning (3)
- ORLA 4044 Developing and transforming education (3)
- ORLA 4010 Organizational behavior and change (3)
- ORLA 4025 School business administration (3)
- ORLA 5025 The ecology of datadriven leadership (3)
- ORL 5521 Overview of research methods (3)
- ORLA 5530 Leadership and action research in organizational behavior (3)
- ORLA 4030 Ethical issues in school leadership (3)
- ORLA 6460 Internship in school leadership (3)

Students are required to complete two types of leadership experiences:

- Course-related field-based leadership experiences, unrelated to their internship site
- ORLA 6460 Full-time internship (15 weeks) (3 points)

The combination of field experiences (course based and internship based) ensures that students gain leadership experiences in multiple districts, serving students with different developmental levels and that vary by socio-economic backgrounds.

The internship is competency-based and developed jointly between Teachers College and school leaders. The learning expectations for the internship are framed by the internship agreement, which developed within the first month of the internship to stipulate the leadership experiences to be provided and the competencies to be met through the building level internship.

This concentration has intensive field-based experiences in addition to course-linked field experiences. The first is a public school internship for a minimum of 230 hours. It is focused on instructional leadership, is framed by a defined set of competencies, is supervised by an approved internship mentor, and requires several products. Students attend an internship seminar (ORLA 6460 Internship in

Public School Leadership) throughout their internship experience for focused discussion, problem solving, and reflection. Students keep an internship journal, write an instructional leadership analysis (focusing on curriculum, instruction, superintendent and the learning environment; professional development and human resources; and student personnel services), and complete one to three field-based projects.

The overall curriculum for the School-Year Ed.M.- Public School Building Leadership and Public School District Leadership is outlined below:
Leading Learning (minimum of 9 points)

- ORLA 4049 Creating a learning community (3)
- ORLA 5029 Supervision of teaching and learning (3)
- ORLA 4044 Transforming school
transforming education Teaching, learning, and assessment (3)

Organizational Behavior (minimum of 12 points)

- ORLA 4010 Introduction to organizational change theory in edcuation (3)
- ORLD $5061 \quad$| The learning organiza- |
| :--- |
| tion (3) |
- ORLA 4045 Reconstructing schooling in urban environments (3)

And one of the two following courses:

| - ORL 5362 | Group dynamics: |
| :--- | :--- |
| - ORLJ 5340 | A systems perspective (3) |
| Conflict resolution (3) |  |

- ORLJ 5340 Conflict resolution (3)

Management Science (a minimum of 9 points)

- ORLA 4025 School business administration (3)
- ORLA 5025 Ecology of data driven leadership (3)
- ORLA 4046 School finance: Policy
- ORLA 4021 and practice (3)
- ORLA 4022 management systems (3)
- ORLA 4022 Introduction to management systemslab (1)

Policy and Politics (a minimum of 9 points)

- ORLA 5646 Education policy: Implications for practice (3) or
- ORLA 4048 Educational policy:
- ORLA $5012 \quad \begin{aligned} & \text { Implementation (3) } \\ & \text { Community leadership (3) }\end{aligned}$

And one of the following courses in law and education:

- ORLA 5016 Law education institution: Equity issues (3)
- ORLA 4086 Law education: Authority
religion free speech (3)

And one of the following three courses:

- ORLA 4058 Privatization and choice in education (3)
- ITSF 4050 Economics of education (3)
- ORLA 6542 History and politics of urban school reform (4)

Research Methods (12-15 points)

- ORL 5521 Research methods in education (3) (required of all students)
- HUDM 4122 Probability and statistical inference (3) (required of all students)

One of the following two courses:

- ORLA 5530 Action research in organizational behavior (3) or
- HUDM 5055 Evaluation institutions program curriculums I (3)

For further information on this concentration, please contact Prof. Robert Monson, (212) 6788118 or rjm210@columbia.edu.

School-Year Doctoral- Public School Building Leadership and Public School District Leadership (application code: TAL) (Ed.D.for aspiring district-level leaders)

This 90 -point university-based concentration combines the practical and theoretical study of organizational behavior, leading learning, management science and educational policy and politics, with attention to four cross-cutting themes- diversity, technology, leadership, and organizational change. It is designed around the six core principles of the Public School Building Leadership and Public School District Leadership course of study and more recently the NCATE/ELCC standards and NYS certification requirements and nine essential characteristics of an effective leader. It is intended for students who aspire to school district leadership.

The School-Year Doctoral- Public School Building Leadership and Public School District Leadership has a series of required courses, organized around its four primary areas: leading learning (creating a learning community, supervision of teaching and learning, developing and transforming education); organizational behavior (organizational behavior and change, and a course in group dynamics or conflict resolution); management science (school business administration and ecology of
educational planning and management); policy and politics (one of three possible law courses and one topical policy course).
In addition, to develop their research skills for inquiry and reflection in educational practice, all students are to complete an overview research methods course and either action research or evaluation research methods. To develop their ethical foundations, students take a required course on ethical issues in educational leadership and one of three possible history of education courses. Finally, to broaden their foundation in education, they may select from among three possible courses in philosophy, technology, or psychology.

The overall curriculum for the School-Year Ed.D.- Public School Building Leadership and Public School District Leadership includes all the courses outlined under the School-Year Ed.M.- Public School and School District Leadership curriculum (see above), as well as the following:

- One research design and data collectioncourse (unless using ORLA 5530 or HUDM 5055) plus
- One research analysis and reporting course linked to the research design and method chose.


## Foundations (a minimum of 9 points) <br> One history of education course:

- A\&HH 4070 History of education in US (3)
- A\&HH 4076 History of urban education (3) and
- ORLA 4030 Ethical issues in educational leadership (3) and

One of the following foundation courses:

- A\&HF 4090 Philosophies of education (3)
- HUDK 4080 Educational psychology (3)
- HUDF 4021 Sociology of education (3)
- ITSF 4050 Economics of education (3)

Integrating experiences (a minimum of 9 points)

- ORLA 6461 School district internship in organization and leadership (3)
- ORLA 6560 Doctoral candidacy seminar (3)
- ORLA 7500 Dissertation seminar in educational leadership (1-3)

Elective courses (14-19 points):
Students are encouraged to explore electives across Teachers College and Columbia University. Electives also provide an opportunity for doctoral students to deepen their

## Organization

 and Leadershipscholarship in a specific theoretical domain of interest germane to their research agenda. The Education Leadership Program faculty recommends that students select their electives from among the following courses:

- ORLA 5012 Community leadership: Inter-organizational and community relations (3)
- ORLA 4058 Privatization and choice
- C\&T $5074 \quad$ in education (3) $\begin{aligned} & \text { Curriculum and teaching }\end{aligned}$
- ORLF $5042 \quad \begin{aligned} & \text { policy (3) } \\ & \text { Urban politics and }\end{aligned}$
- ORLA $4047 \quad$ Political policy analysis in education (3)
- ORLA 4020 Sociology of educational processes in formal organizations:
Theoretical perspectives on institutional change in education (3)
- ITSF 4155 Evaluating educational privatization and school choice (3)


## Field Experiences

In addition to the internship and Capstone Projects, the curriculum incorporates field experiences that give students opportunities to observe and reflect on relationships between leadership theory and practice.

Ed.D. students must complete an internship in school leadership, as well as other fieldwork requirements the faculty may specify. The internship is designed to provide each student with an intensive experience in a school district, working with a mentor school district administrator. Students are to work a minimum of 230 hours, attend an internship seminar, complete an analytical paper, and undertake one to three standards-based work projects. Through the seminar, mentor contact, and journal writing, students reflect upon their learning experiences and integrate their academic coursework.

## Additional Requirements for Ed.D. Students

Ed.D. students must also complete requirements for doctoral certification/advancement to candidacy and for completion of the doctoral dissertation. In order to be officially advanced to doctoral candidacy, Ed.D. students must satisfactorily complete both 1) field-based Capstone Project, and 2) a qualifying paper. Each is evaluated by at least two program faculty, and each must be determined to be of doctoral quality for the student to be advanced to candidacy.

For further information on this course of study please contact Prof. Robert Monson, (212) 6788118.

## Private School Leadership Program Director: Professor Pearl Rock Kane

Program Office: (212) 678-3156
Email: Klingenstein@columbia.tc.edu
Web site: www.klingenstein.org.
Course of Study in Private School Leadership (M.A., Ed.M., Ed.D.) (Application code: TAL)

This course of study prepares students to meet the challenges of leadership as school heads, principals, deans, department heads, and instructional leaders. The course of study increases 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, and finance. Students participate in guided fieldwork experiences and benefit from a connection to an extensive network of cooperating schools. Programs in the Private School Leadership course of study include:

- Year-long Master's- Private school leadership (M.A., Ed.M.)
- Leadership Academy (Summer cohort program) (M.A., Ed.M.)
- School-Year Ed.D. in Education Leadership Studies with a focus in Private School Leadership.

The Year-long Masters- Private School Leadership and the Private School Leadership Academy (Summer cohort), are supported by the Esther A. and Joseph Klingenstein Center and the Educational Leadership Program.

Year-long Master's- Private School Leadership (M.A., Ed.M.)

## Master of Arts

The 32-point Master of Arts degree in Education Leadership, with a course of study in Private School Leadership, consists of required core courses and elective course options. (See below for a description of core courses and a sample list of elective courses). Students are required to complete a research project in collaboration with a small group of students and to participate in internships in New York City public and private schools.

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 Education Leadership, with a course of study 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.

## Leadership Academy (Summer cohort program)

 (M.A., Ed.M.)Designed for teachers and administrators who are endorsed by their Heads of School as strong educational leaders and who choose to stay at their jobs during the academic year, the Leadership Academy offers the same degree options (M.A. and Ed.M. in Education Leadership, School Year Masters- Private School Leadership). Rigorous study, collaborative projects, and practica in administration are hallmarks of the program. Unlike the Private School Leadership Program, the Leadership Academy 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 of usefulness to their host schools. The program of study is completed over 18 months. Independent school educators with 3 years' full-time teaching and/or administrating 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, Leadership Academy students must be endorsed 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 30 points of transfer credit may be accepted toward the Ed.M.

The Leadership Academy couples intensive academic summer course work with site-based requirements to offer candidates the opportunity
to combine rigorous academic study with handson investigation and application. Each summer term is divided into two three-week sessions. Students take two full courses and a seminar (Supporting Teaching and Learning) each session. 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 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 in fostering continued learning.

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 and with the project director. Findings are presented during the second summer of coursework with the accompanying paper to be shared with both the research professor, project director, 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. Though there are endless possibilities, practical tasks may include: balancing a budget, researching prospective school donors, overseeing and/or participating in the admissions process. All students are required to keep a journal in response to their experiences. 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.

## 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 Columbia University's Graduate School of Arts and Sciences 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.School-Year Ed.D. in Education Leadership Studies with a focus in Private School Leadership At the doctoral level, the Ed.D. in Education Leadership with a focus in Private School Leadership builds on the sequence of courses designed for the master's degree and is tailored to meet department requirements and the professional interests of the student. Contact Professor Pearl Rock Kane at (212) 678-3156 or via email at kane@tc.edu for more information.

Course of Study in Education Leadership Studies (application code: TAL) (M.A., Ed.M., Ed.D., Ph.D.)
This concentration does not lead to a New York State administrative certification as a publicschool principal or superintendent.

Leadership, Policy and Politics (M.A., Ed.M., and Ed.D.)
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 course work leading to the M.A., Ed.M., or Ed.D., and to the Ph.D. in Education

Leadership. Most course work is offered during the school year. Contact Prof. Luis Huerta at (212) 678-4199. For individual degree program planners and special applications go to www.tc.edu/o\&l/lpp.
M.A. in Education Leadership with a course of study in Leadership, Policy and Politics (Code: TAL)
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 (Code: TAL)
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 (Code: TAL)
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 policy-related 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

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full- or part-time basis.
Ph.D. in LPP: See Ph.D. in education leadership studies.

Course of Study in Education Leadership Studies (M.A., Ed.M., Ed.D., Ph.D.) (Code: TAL)

This course of study does not lead to state administrative certification as a public-school principal or superintendent.
M.A. in Education Leadership with a course of study in Education Leadership Studies (Code: TAL)
This 32-point concentration prepares students for positions of administrative leadership in public schools and in private organizations that work with public schools, such as not-forprofit organizations, government agencies, education-related businesses, and advocacy groups. The curriculum allows students to develop a unique program of study in close consultation with an advisor. Completion of this course of study does not lead to New York State School Building Leadership or School District Leadership certification.

Ed.M. in Education Leadership with a course of study in Education Leadership Studies (Code: TAL)
The 60 -point Master of Education with a specialization in Education Leadership prepares students for positions of administrative leadership in public schools and in private organizations that work with public schools, such as not-for-profit organizations, government agencies, education-related businesses, and advocacy groups. The curriculum allows students to develop a unique program of study in close consultation with an advisor. Completion of this course of study does not lead to New York State School Building Leader or School District Leader certification. Contact Professor Jay Huebert at (212) 678-3775 for more information.

Ed.D. in Education Leadership with a course of study in Education Leadership Studies (Code: TAL)
Please refer to the doctoral degree information below for more information on the Ed.D. in Education Leadership.

Ph.D. in Education Leadership with a course of study in Education Leadership Studies (Code: TAL)
Please refer to the doctoral degree information below for more information on the Ph.D. in Education Leadership

## Doctoral Degrees

Doctor of Education
The 90 -point Doctor of Education (Ed.D.)
degree in Education Leadership is available in
the following concentrations: Public School Building Leadership and Public School District Leadership (TAL), Private School Leadership (TAL); Leadership, Policy and Politics (TAL); Students in Public School and School District Leadership must complete the Education Leadership Program's Ed.D. requirements in that concentration while students in Private School Leadership as well as Leadership, Policy, and Politics concentrations must complete requirements of the Ed.D. in Education Leadership Studies. Regardless of concentration, completion of an Ed.D. in Education Leadership requires 90 points. A maximum of 40 transfer points may be accepted.

The concentrations are designed with both theory and practice components. They serve professionals in education who intend to be actively involved in educational leadership at the building, district, regional, state or national levels. They also serve students aspiring to policy research, the professoriate, and employment in a variety of educational institutions and settings. Applicants who are admitted to these programs become eligible for advancement to doctoral candidacy upon successful completion of 60-70 points of course work, a sequence of approved field experiences, a capstone project, a qualifying paper, and holistic reviews by the Education Leadership Program in faculty. They must also complete an applied research methods course sequence suited to the concentration pursued. Please note that any program student with 6 or more points of incompletes may not initiate the advancement to candidacy process integral to completion of the doctoral program.

Thereafter, candidates complete their remaining course work while preparing a dissertation under the direction of faculty in the Program. The Ed.D. in Educational Leadership builds competence in the areas of leading learning organizational analysis, management systems, and policy analysis.

Course work beyond the M.A. level and research experiences are individually planned by the student and his/her advisor, according to the student's experience, focus, and needs. On average, full-time Ed.D. students can complete the degree requirements and graduate in three to five years. Ed.D. students who work full time typically require substantially more time to complete their degrees.

## Doctor of Philosophy (Code: TAL)

The Ph.D. in Education Leadership is designed for aspiring researchers, professors, and policy analysts, emphasizing research and intensive specialization in issues relating to the intersec
tion of leadership, politics, and policy in public or private schools. The program may be completed in 75 points, of which up to 30 acceptable credits may be transferred from another graduate institution. In addition to study in education Leadership, Policy, and Politics, the program requires extensive preparation in quantitative and qualitative research methods and one of the cognate social science faculties of the University, for example, Political Science, Sociology, or Economics. The program is research focused and theory-based. The Ph.D. program in educational leadership is designed to prepare candidates for research and academic careers.

Students who seek careers as practicing education leaders in schools and other educational institutions should apply to the Ed.D. program. Before making application to the Ph.D. program in Education Leadership, applicants are encouraged to consult with Professor Jeffrey Henig at (212) 678-8313.

Course of Study in Education Leadership and Management (application code: TAA) (Dual Degree Program with Columbia Business SchoolEd.D. $\mathcal{E}$ M.B.A.)

## Special Application Requirements/Information:

Education Leadership and Management Program

- The Graduate School of Business requires all applicants to take the GMAT exam. Applicants may submit GMAT scores to Teachers College in lieu of GRE or MAT scores.
- Applicants to the dual M.B.A.Ed.D. Program in Education Leadership and Management must be admitted both to Teachers College and to the Columbia University Graduate School of Business. The appropriate applications and supporting credentials must be submitted to each school.
- All degree applicants are required to have access to a computer. Doctoral students are encouraged to purchase a laptop computer. Completion of the doctoral student certification examination will require relevant computer competencies.

The Education Leadership and Management is a 90 -point Ed.D./M.B.A. program offered jointly with the Columbia University School of Business. The course of study focuses on the areas in which education leadership and business management overlap. It prepares graduates for leadership roles improving educational practice and applying management skills to the field of education. Graduates typically enter educational management positions
in public school districts, universities, foundations, business, and all levels of governments. Students must apply and be admitted both to Teachers College and the Columbia University Graduate School of Business. All students should consult with an academic advisor to plan an appropriate academic program of study. Students in the dual Ed.D./M.B.A. program ( 90 -points) must complete requirements of the Ed.D. in Education Leadership. Contact Professor Craig Richards at (212) 678-3775.

Academic Matters at Columbia Business School: It is required that students spend one year of full-time at the Business School. Students who are admitted to the Columbia Business School are responsible for a series of required courses, as well as a selection of electives. These are:

| 1st Term | 2nd Term |
| :---: | :---: | :---: |
| - B6006 Managerial |  |
| economics |  |$\quad$ • B6005 The Global \(\left.\begin{array}{l}economic <br>

environ- <br>
ment <br>
managing <br>
marketing <br>
programs\end{array}\right)\)

3rd Term (Required)

- B8001 Strategic management of the enterprise

3rd Term Suggested Electives
(5 electives for a total of 15 points)

- Turnaround management
- Social entrepreneurship
- Financing the mission-based business
- New product development
- High performance leadership
- Top management processes
- Negotiation
- Non-profit consulting
- B8210 Management information, communications, and media resources
- B8211 Cost-benefit analysis
- B8234 Business and economic forecasting
- B8704 Managing innovation
- B8705 Managing new ventures
- B8706 Managing group and interpersonal dynamics
- B8707 Managing conflict
- B8708 Managing strategic decisions
- B8709 Management of the socially responsible
- B8710 Managing and developing organizational resources
- B9701-50 Inner-city consulting
- B9701-61 Entrepreneurship and technology

For more information about Columbia Business
School courses please refer to
http://www.gsb.columbia.edu/mba
Academic Matters at Teachers College: There are six areas that each doctoral student in the Dual Degree Program is required to study (for a total of 45 points that attempt to avoid duplication with the coursework of Columbia Business School) in order to be prepared to complete the dissertation. These are:

- Leading learning (6 points) (e.g., Creating learning communities; Developing and transforming education)
- Policy and politics (6 points) (e.g., Law and education; Education policy and politics)
- Research methodology (12 points) (e.g., Overview of research methods; Methodological research design; Methodological data analysis; Experimental and quasi-experimental research design; Survey research design; Applied qualitative research design; Evaluation; Action research)
- Foundations (6 points) (e.g., Ethics in education; Philosophy of education; History of American education; Educational psychology)
- Management science (6 points) (e.g., Education finance; Economics of education)
- Electives (9 points)

Students admitted to the Dual Degree Program are required to complete an internship that is located in a sector of the education industry. This requirement can be fulfilled during summer months on a full-time basis or part-time during the academic year. The internship is to culminate with an analytical essay (see Advancement to Candidacy

Requirements) that demonstrates mastery of coursework at Teachers College. In order to be advanced to doctoral candidacy all students must prepare and submit for review and acceptance a Qualifying Paper (see Advancement to Candidacy Requirements).


## EDUCATION <br> 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.

## Klingenstein Fellows Program <br> Program Director: Pearl Rock Kane

The Klingenstein Fellows Program is a oneyear or a one-semester program designed to develop leadership skills in administration or academic areas. Fellows may elect to enroll in a degree program or to do graduate work as a non-degree student. Through seminars and course work at Teachers College and the other professional and graduate schools of Columbia University, the program seeks to enlarge the perspectives of Fellows and to prepare them to assume increased leadership responsibility. The fellowship includes a living stipend and a substantial tuition allowance.

Applicants for the Klingenstein Fellows Program who wish to be considered for the master's degree must submit the Klingenstein Fellows application as well as the Teachers College Application for Admission. Please send the fellowship application to the Klingenstein office by January 15 and the Teachers College application to the Admissions Office by January 15. Contact Professor Pearl Rock Kane at (212) 678-3156 for more information.

## Klingenstein Summer Institute

An intensive off-site residential summer institute is offered for two weeks beginning in midJune independent elementary, middle, or for high school teachers with two to five years of teaching experience. 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 Professor Pearl Rock Kane at (212) 678-3156 for more information.

## Klingenstein Visiting Fellows Program

The Klingenstein Visiting Fellows Program is a two-week program of intensive study and interaction with professional peers for heads of independent schools. 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 educational philosophy, 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 April 1st. Contact Professor Pearl Rock Kane at (212) 678-3156 for more information.

## Superintendents Work Conference

The conference is a week-long professional development program held each year during the month of July. Conference participants meet with nationally known educational leaders, public policy makers, and scholars to discuss and analyze major educational and social issues. Attendance is by nomination and invitation. Contact Professor Arlene Ackerman at (212) 678-3783 for more information, or visit http://conference.tc.columbia.edu

## School Law Institute

The School Law Institute is a five-day, national professional-education program for educators and attorneys, administered in July by the Center for Educational Outreach and Innovation and held at Columbia Law School. Topics covered include safety and order (search and seizure, child abuse, and the schools' authority to regulate student and staff conduct); equity issues (affirmative action, harassment, HIV/AIDS, school-finance reform, and issues of poverty and race in education); special education law and policy; standards-based reform and high-stakes testing; confidentiality of student records; legal issues in teacher evaluation; and free speech rights of students and teachers. For further information, contact the Center for Educational Outreach \& Innovation at (212) 678-3987.

## Management Systems Summer Institute

The Summer Institute in Management Systems meets for two weekends in June. It is designed to enhance the school administrator's perspective of the business side of the educational enterprise. Each summer takes a new topic. Past topics have included: The Ecology of Financial Planning, Budget Forecasting, School Facility Needs Assessment, and the Politics of the Budget Process. Future topics will include: Managing Technology in the Classroom, The Pros and Cons of Private Contracting and School Site Budgeting. The Institute offers a combination of classroom lectures by leading experts in the field, simulations, case studies, and team work. Contact the Center for Educational Outreach \& Innovation at (212) 678-3987 for more information.

## Concurrent Programs in <br> Education and Law

The Education Leadership Program 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 joint-degree 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 Education Leadership Program as described in the Program Study Guide at www.tc.edu/o\&l and (3) their faculty advisors.

## General and Research

ORL 5521. Introduction to research methods in education (3)
Professors Knefelkamp, Neumann, and Richards. This course meets a Departmental requirement for an introductory course on understanding research across a wide spectrum of educational settings. Basic concepts of research methods and theories of research are introduced so that students can comprehend and critique education research and evaluation. Methods discussed include both qualitative and quantitative approaches to research, such as surveys, case studies, ethnography, participant observations, interviews, and oral histories.

## ORL 6518. Methods of case study

and analysis (3)
Faculty. Techniques and methods of preparing and analyzing case studies of organizations and institutions.

ORLA 4001. Introduction to school leadership and decision making (3) Professors Richards and Maltbia. An introduction to educational governance, organization, policy making, administration, and leadership of schools and school systems in the United States. The course combines the study of theory and practice through the use of case studies and critical incidents.

ORLA 4900. Research and independent study in educational leadership (1-8)
Permission required from individual faculty. Special individualized work.

ORLA 5029. Supervision of teaching and learning (3)
Professor Monson. Students in this course will integrate theories of human behavior (e.g., Maslow) and organizational development (e.g., McGregor's X\&Y), with effective practices in the evaluation; criterion-referenced and goal-based evaluation models; current models of teacher evaluation (Hunter and Danielson \& McGreal); performance-based compensation models; and, the legal realities of implementing these systems.

ORLA 5051. Program leadership: Cases (2) Faculty. Permission required. Case studies in a simulated school system.

## ORLA 5830. The Klingenstein Summer

 Institute (4)Professor Kane. Permission required. Enrollment limited. An intensive residential program that introduces young liberal arts graduates to the complexity and challenge of teaching in independent schools. Topics include curriculum and assessment, understanding school organizations, issues of diversity and philosophy.

ORLA 6460 (fall) and ORLA 6461 (spring). Internship in school and school district leadership (3)
Professor Monson. Permission required. A 200 hour supervised field experience in school or school district leadership. Partially satisfies New York State requirements for School Building Leadership or School District Administrator.

Colloquia in Education Administration Colloquia centered upon an analysis of selected research in each of the four major areas of administration and the implications of this theory for administrative practice.

ORLA 5689. Klingenstein colloquium:
Visiting fellows (4)
Professor Kane. Permission required.
ORLA 6560. Doctoral candidacy seminar (3) Faculty.

ORLA 6611. Colloquium in organizational behavior (3)
Faculty. Permission required. Emphasis up classic studies and analysis of the implications of research for organization theory and practice.

ORLA 6621. Colloquium: Management science ( $1-4$ per section)
Professor Richards. Permission required.
ORLA 6631. Colloquium: Institutional analysis ( $1-4$ per section)
Professor Kane. Permission required.
ORLA 6641. Colloquium: Policy analysis and action (1-4 per section)
Faculty. Permission required.

ORLA 6900. Research and independent study in educational leadership (1-8) Special individualized work. Permission required.

ORLA 7500. Dissertation seminar in educational leadership (1-3) Faculty. Registration required of all doctoral candidates in this course or in two other courses in ORLA 7500-7503 series offered by faculty of department. Development of doctoral dissertation proposals and presentation of research plans for approval. Note: The formal hearing of a dissertation proposal (blue form) is a separate event.

## ORLA 7501 and ORLA 7503. Research

 seminar (1-4 per section)Faculty. For the student at the dissertation level. Emphasis on the individual student's area of concentration for the purpose of critiquing work, while simultaneously analyzing the implications of the research for education.

## ORLA 7570. Research in leadership

(1-4 per section)
Faculty. Permission required. Advanced seminar involving a critical review of important works in educational leadership and presentations of works in progress.

## ORLA 7573. Advanced seminar

(1-4 per section)
Faculty. A dissertation seminar, the content of which is the formal presentation of students' dissertation work and discussion of the implications for the practicing administrator/analyst.

## ORLA 8900. Dissertation advisement

 in educational leadership (0)Faculty. Individual advisement on doctoral dissertation. Fee to equal three points at current tuition rate for each term. For requirements see section on Continuous Registration.

## Leading Learning

ORLA 4038-ORLA 4039. Leadership of elementary schools (3)
Professor Levin. ORLA 4038 deals with the elementary principalship, linkages to the community, and the instructional program. ORLA 4039 focuses on school organization, pupil personnel, teacher personnel, and funds and facilities. Registration for either one or both courses is permitted.

ORLA 4044. Transforming schools and transforming education (3)
Professor Drago-Severson. In this course we will explore an expanded notion of leadership that includes adult development. Participants interested in organizational leadership and growth, especially teachers, principals, superintendendents, and other leaders, will study constructive developmental theory, pillar practices for supporting adult growth and how both offer leadership practices for supporting adults'
transformational learning. Instructor's permission is required.

## ORLA 4045. Restructuring schooling

 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 the theoretical foundations research and political support and implementation consequences of system-wide school reform and analysis of how both experimental and systemwide change is initiated.

ORLA 4049. Creating a learning community (3)
Professor Drago-Severson. How can we create learning communities that better support adult learning? School leaders need to exercise practices in service to professional development in order to be effective leaders. In this course we will explore an expanded notion of leadership that includes support for adult learning.
Participants interested in organizational leadership and growth, especially teachers, principals, superintendents and other school leaders, will study the theory and research on adult learning and its connection to leadership practices. Through lectures, readings, discussion, case analyses, and interactive exercises, we will examine: (1) conceptions of leadership in support to adult learning; (2) theories of adult learning (central concepts); (3) essential elements for creating positive learning communities for adult learning (challenges and creative strategies); (4) practices that support adult learning and the adult learning principles informing them; and (5) the importance of caring for one's own development and learning while caring for the learning of others. You do not have to have formal leadership experience to benefit from this course. Individuals with interest in supporting and sustaining adult learning in various contexts (e.g., schools, non-profits, organizations, etc.) are most welcome. Permission of the Instructor is required prior to first class meeting.

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. A consideration of the diversity, purposes, organization, and structure of private schools and an analysis of faculty and administrative roles as compared with public schools.

ORLA 4071. The leadership of private schools and non-profit organizations (3) Professor Kane. Permission required. The aim
of this course is to develop further the ability to exercise leadership and to increase the capacity to sustain the demands of leadership.
The specific goals of the course are, to increase knowledge of administrative practice; to cultivate skills, including effective teamwork; and to develop habits of mind, such as reflective practice and openness to multiple perspectives.

ORLA 5029. Supervision of teaching and learning (3)
Professor Monson. 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. Program leadership (2-3) Faculty. Focuses on dilemmas facing institutional leaders in an effort to promote reflec-tion-in-action among administrators. Special fee: $\$ 10$.

ORLA 5055. School administration and cultural diversity (3)
Faculty. An in-depth exploration of major challenges posed by cultural and linguistic diversity from the perspective of the school administrator.

ORLA 5532. Program development: Teaching, learning, and assessment (3) Professor Monson. School community relationships, needs assessment, program planning, and evaluation of student progress. Special emphasis on the principalship.

ORLA 5587. Klingenstein seminar for independent school educators (1-3) Professor Kane. Permission required. The purpose of this class is to equip educational leaders with the knowledge and skills necessary to support and improve teaching and learning in their schools. Factors that relate to learning including school context, professional culture and the influences of student characteristics, such as race, ethnicity and gender, are explored. Students also work in groups to examine various aspects of the schools in which they have worked to identify commonalities and distinguishing features. The spirit of a seminar characterizes the class, which is highly interactive and involves peer review.

## Organizational Behavior

ORLA 4010. Introduction to organization and change theory in education (3)
Professor Riehl. An introduction to various psychological, sociological, and cultural theories and perspectives on organizational behavior and organizational effectivenesss and their application to organizational study and prob-
lem solving. Students apply organizational theories to analyze an organization and its formal and informal attributes, and solving an organizational change problem.

ORLA 4030. Ethical issues in educational leadership (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 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. Special fee: $\$ 50$.

ORLA 5018. Understanding authority and exercising leadership (3)
Professors Drago-Severson and Buffett. Through lectures, readings, group discussions, case analysis, and interactive exercises, students will examine: (1) conceptions of leadership in support to adult learning and development; (2) various theories of adult learning (central concepts) and constructive-developmental theory; (3) essential elements for creating positive learning environments for adults; (4) practices that hold the potential to support adults' transformation learning (e.g. teaming, assuming leadership roles, reflective practice, and mentoring) and the developmental principles informing them; and (5) the importance of caring for one's own professional development and learning while caring for the learning of others.

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 on the use of action research to foster organizational learning and problem solving through systematic inquiry and reflection. Students conduct an action research project.

## 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, collective negotiations.

## ORLA 6552. Behavioral analysis of

 leadership (3)Faculty. Critique of and application of research on leadership. Analysis of case studies, with the development of a strategic plan for a case site.

## Management Systems

ORLA 4021. Introduction to management systems (3)
Faculty. Co-requisite: ORLA 4022. An introduction to the fundamental principles and concepts of management information systems. The course examines the management of information systems across several different types of organizations, with an emphasis on the management of education-related information systems in $\mathrm{K}-12$ as well as in institutions of higher education. The course explores both the theoretical as well as practical implications of information systems. Several key themes are addressed, such as: looking at how information systems can increase the problem-solving capabilities within an organization or school; and exploring how information can enable leaders to perform their jobs more effectively. Special fee: $\$ 50$.

ORLA 4022. Introduction to management systems-lab (1)
Co-requisite: ORLA 4021. The purpose of this lab is to provide students with technical hands-on computer experience in web-based technologies and database design. This lab is designed to build the capacity of students to conceptualize and develop data-based information systems. Students will be introduced to resources and participate in exercises related to the design, implementation, and maintenance of an information system.

## ORLA 4025. School business

 administration (3)Professor Richards. Introduction to school business administration including overview of fiscal and property accounting, district and site-based budgeting, cash planning, purchasing and supply management, transportation systems, operation and maintenance of facilities, and management of food services. Special fee: $\$ 30$.

## ORLA 4049. Creating a learning

 community (3)Faculty. This course emphasizes the role of educational leaders as policy makers and policy analysts in formulating policies that promote educational improvement and change. Students will analyze profiles of effective leaders who have used their positions to shape educational policy in elementary and secondary education.

## ORLA 4820. Summer institute:

Management systems (4)
Faculty. Broad introduction to the conceptual underpinnings and intensive hands-on application of microcomputer-based techniques for management planning, resource allocation, information systems design, and data basedpolicy and decision analysis in both public and private organizations. Special fee: $\$ 50$.

ORLA 4874. Strategic marketing for academic institutions (3)
Faculty. This course focuses on marketing concepts for private schools and non-profit organizations. Students explore how institutions describe themselves and how they relate to various external publics such as students, parents, board members, and donors. Topics of study will include mission statements, core marketing approaches and strategies for growth and communication. Students work in groups to design a marketing plan for an organization of their choice.

## ORLA 4876. School finance: Resource

 allocation for nonprofit organizations (3) Faculty. An exploration of the business aspects of managing private schools and non-profit organizations. 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, and government compliance.ORLA 5020. Information systems for decision making in learning organizations (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. Special fee: $\$ 50$.

## ORLA 5025. Ecology of educational

 planning and management (3)Professor Richards. This course takes an open systems or ecological approach to planning and management in educational institutions of all kinds, including pre-school, elementary, secondary, higher education, and other public and private institutions. It focuses on both the personal and institutional nature of planning in complex, highly adaptive organizations. Students will learn how to conduct ecological audits, develop strategic plans, benchmark organizational performance, and write policy options briefs. Some familiarity with computers recommended. Materials fee: $\$ 10$.

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: $\$ 30$.

## Policy Analysis and Politics

ORLA 4040. Education policy: Implications for practice (3)
Faculty. An introduction to policy analysis concepts and techniques in a range of school and nonschool settings. Emphasis on technology and learning.

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 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. Materials fee: $\$ 25$.

## ORLA 4047. Political policy analysis

 in education (3)Faculty. An overview of theories and techniques of political policy analysis as they apply to education. Emphasis on developing politically feasible and technically attractive responses to the policy problems facing educational leaders in schools, districts, states and the federal government, as well as non-governmental actors. Theories based in political science are applied to actual cases. Key organizing themes are value dilemmas in highly contested and uncertain decision arenas, and the significance of policy contexts in education. Materials fee: $\$ 30$.

ORLA 4048. Education policy: 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 the implementation issues in bottom-up and top-down policy change are explored.

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. An investigation of the controversial issues concerning the choice movement. Topics include: charter schools, vouchers, home schooling, and for-profit educational enterprises. The purpose of this course is to
understand the configuration of school choice in America and the implications of those choices for a democratic society.

ORLA 4086. Law and educational institutions: Issues of authority, religion, free speech and safety (3) Professor Heubert or Professor Sigall. This introductory course focuses on legal issues that arise in public and private schools. Topics include regulation of public and private schools; church-state issues; free-speech rights of students, teachers, and extracurricular groups; who controls the curriculum; the 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.

## 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 5012. Community leadership: Interorganizational and community relations (3) Professor Monson. Political analysis of administration at the service delivery and community levels.

ORLA 5016. Law and educational institutions: Equity issues (3)
Professor Heubert or Professor Sigall. This course focuses on issues of equal educational opportunity. Topics include desegregation; testing and classification of students; services for immigrant students; harassment based on race, sex, and sexual orientation; employment discrimination; school finance reform; special education; HIV/AIDS; affirmative action; and issues of race and gender in testing, curriculum, and instruction.

## ORLA 5086. Judicial remedies and

 educational reform (3)Professor Rebell. Beginning with the school desegregation decrees issued by the federal courts in the wake of Brown v. Board of Education, judges have been called upon to oversee wide-ranging institutional reform processes that bear little relationship to traditional judicial remedies. This course will examine the legal and political justifications for the courts' role in reforming public institutions, as well as the court's capacity to effectuate substantive reforms. The course will give particular attention to school desegregation cases in federal courts and fiscal equity and education adequacy litigations in state courts. It will also consider the use of public engagement mechanisms to facilitate an on-going dialogue between the courts and the legislative and executive branches.

## Organization AND LEADERSHIP

ORLA 5096. Introduction to special education law (3)
Professor O'Neill. 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 Shipps and Luis 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 5541. Federal politics, federal policies, and administrators (3) Faculty. The impact of federal policies on administrators and vice versa. Examines the interaction between the political arena and the policy arena. Attention to a number of topical areas of policy including implementation studies, the problem of innovation, and nonschool-based educating institutions.

ORLA 5645-ORLA 5646. Educational policy: Planning and implementation (3)

ORLA 5880. School Law Institute (3) Professors Heubert, Sobol, and Rebell and a national faculty. The School Law Institute, administered in July by the Center for Educational Outreach and Innovation, is a five-day course in education and law for educators and attorneys. Topics covered include safety and order (search and seizure, child abuse, and the schools' authority to regulate student and staff conduct); equity issues (affirmative action, harassment, HIV/AIDS, school-finance reform, and issues of poverty and race in education); special education law and policy; standards-based reform and highstakes testing; confidentiality of student records; legal issues in teacher evaluation; and free speech rights of students and teachers.

## ORLA 6540. Topics in urban education policy (3)

Faculty. Leadership responsibility in the formulation, implementation and assessment of urban education policy.

ORLA 6542. History and politics of urban school reform (3-4)
Faculty. This survey course prepares students for their roles as leaders of institutional change by acquainting them with our legacy of urban school reform, its trends and cycles. It covers
political issues in historical context. Multiple versions of accountability, standards, equity, and access make up the cycles of reform to be examined, along with the pedagogical and governance dilemmas (progressivism vs. traditionalist, centralization vs. decentralization) that underlie them. The cross cutting political concerns of power, class, race, gender, and relation will be woven into discussions and course work. Permission required.

## HIGHER AND <br> POSTSECONDARY EDUCATION

Program Coordinator: Associate Professor Kevin Dougherty

Program Office: (212) 678-3750
Email:
highered@tc.edu
Web site: www.tc.edu/o\&l/HigherEd
Higher and Postsecondary Education
(Code: TDN)

## Degrees Offered:

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 positioning in the study of student development through the college years and in its current strengths in higher/postsecondary education 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 experi-ence-based 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, 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. The Ed.D. requires in-depth study in processes/methods of inquiry appropriate to the area of concentration or emphasis, and reflecting substantial theoretical understanding of the area and approaches to inquiry within it. 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 <br> 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 must 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)
- ORLH $4010 \quad$ Purposes and policies of higher education (3)
- ORLH 4011 Curriculum and instruction in higher education (3)
- ORLH 4040 The American college
- 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, function, and issues (3), or other with advisor approval (3)
- ORLH 4042 Student personnel administration: Programs and services (3), or other with advisor approval (3)
- ORLH 5522 Contemporary student issues and policies (3)
- ORLH $4500 \quad$ Special topics in higher education or other with advisor approval (3)

One (1) course from the following:

- ORLH 4012 The community college (3)
- ORLD 4051 How adults learn (3)
- ORLH 5011 College teaching and learning (3)
- ORLH 5044 Theories of diversity in
higher education (3)
- ORLH 5527 The college professoriate (3)
- ORLH $6511 \quad$ Coordinating seminar (3)
- ORLH 6556

Educational leadership (3)

- One (1) additional course. M.A. students with internship must take ORLH 5241, Observation and supervised fieldwork. Non-internship students may elect any Teachers College course (1 point).
- Minimum of three out-of-program Teachers College elective courses including one 3 -point course, one 1-point course, and ORL 5521.


## 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:

| - A\&HH 5070 | History and theory of higher education (3) |
| :---: | :---: |
| - ORLH 4012 | The community college |
| - 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 (topic/section to be designated), or ORLH 6550/6551 Advanced seminar in higher education (3) |
| - ORLH 5527 | The professoriate (3) |
| - ORLH 6521 | Advanced seminar in the community college (3) |
| - ORLH 6550 | Advanced seminar: <br> Research administration (3) (or equivalent) |
| - ORLH 6551 | Advanced seminar: <br> Comparative-international higher education (3) |
| - ORLH 6556 | Educational leadership: research art and practice (3) |

- One (1) additional course. M.A. students with internship must take ORLH 5241, Observation and supervised fieldwork. Noninternship students may elect any Teachers College course (1 point).
- Minimum of 3 out-of-program Teachers College elective courses including one 3 -point course, one 1 -point course, and ORL 5521.

Requirements for Social and Comparative Analysis include the following coursework as well as a culminating project:

Four courses from the following:

- A\&HH 5070
- ORLD 4051

How adults learn (3)
ORLH 4025

- ORLH 4500
- ORLH 5011
- ORLH 5044 Theories of diversity in higher education (3)
- ORLH 5527 The college professoriate (3)
- ORLH 6511 Coordinating seminar (3)
- ORLH 6551 Advanced seminar: Comparative-international higher education (3)
- One (1) additional course. M.A. students with internship must take ORLH 5241, Observation and supervised fieldwork. Non-internship students may elect any Teachers College course (1 point).
- Minimum of 3 out-of-program Teachers College elective courses including one 3 -point course, one 1 -point course, and ORL 5521.


## 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
- ORLH 4010
higher education (3)
- 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
- ORLH $4031 \quad$ Financial administration of higher education institutions (3)
- ORLH 5044 Theories of diversity in
- ORLH 5526 higher education (3)
- ORLH 5526 Literature of higher
- ORLH 5527 The college professoriate (3) Coordinating seminar in higher education (3)
- ORLH 6511 Coordinating seminar (3)
- ORLH 6551 Advanced seminar: Comparative-international higher education (3)
- ORLH 6557/6558 Research practices in higher and adult education (3) or ORLH 6900 Research and independent study 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 course work, completion of a certification exam, and dissertation.

Core courses required:

- ORL 5521 Introduction to research methods in education (3)
- ORLH 4010 Purposes and policies of
- higher education (3)

Curriculum and instruction

- 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
- ORLH 5044 Theories of diversity in

ORLH 5526 higher education (3)

- ORLH 5526 Literature of higher education (3)
- ORLH 5527 The college professoriate (3)
- ORLH 6511 Coordinating seminar in
- ORLH 6551 higher education (3)
- ORLH 6551 Advanced seminar:

Higher education (3)

- 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, development of a concentration within one or two of the curricular domains, or crossing all three; 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)
Professors Anderson and Dougherty. 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) Professor Dougherty and Dr. Hankin. Emerging issues, problems, and trends in community colleges, technical institutes, and adult education. Topics include the history and philosophy of the community college movement, state and local governance, finance, teaching, student personnel work, impact on students, and the future of the community college.

ORLH 4020. College and university organization and administration (3) Professors Anderson and Dougherty. 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 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, remedial education, performance accountability, and the economic development role of higher education.

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 Dougherty. 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 and race differences in college access and choice, and the influence of colleges upon students.

ORLH 4041. Student personnel administration: Organization, functions, and issues (3) Faculty. 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)
Faculty. 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, and college teaching and academic leadership.

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. Open to degree and nondegree students for credit or noncredit.

ORLH 4820. Cultural diversity training in higher education settings: Issues and concerns (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, class, and ethnicity as well as student intellectual and interpersonal development.

ORLH 4845. Diversity: Implications for recruitment and retention (1) Professor Anderson. Students will explore aspects of cultural diversity and multiple oppressions (race, class and gender), as well as environmental concerns affecting the recruitment and retention of diverse student and faculty population 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 5044. Theories of diversity and higher education (3)
Professor Anderson. 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 (1)
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) Glazer-Raymo. Exploration of issues affecting students and therefore the work of student affairs officers, and the role of such officers in developing 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 single-sex colleges, two-year colleges, professional schools, and research universities.
- ORLH 5524. An analysis of student cultures (3)
Faculty. 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 I (3)
Faculty. 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. Advanced professional seminar: 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. Advanced professional seminar: The college professoriate (3) 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 department. Other students in the college who wish to enroll should obtain permission of the instructor. 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)
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 department. Other students who wish to enroll should obtain the permission of the instructor.

- ORLH 5533. Faculty evaluation and development programming (2-3) Faculty. Theory and practice concerning the evaluation 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 the work of Patricia Cross, Thomas Angelo, and Dick Light, as well as 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)
Professors Anderson, Dougherty and Neumann. 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) Professor Dougherty. 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 (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. Permission required. 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).

ORLH 5900. Research in higher education (1-6)
Faculty. 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.

ORLH 6557-6558. Research practices in higher education (1-3)
Professors Anderson, Dougherty and Neumann.

ORLH 6900. Research and independent study in higher education (1-6) Faculty.

ORLH 7500. Dissertation seminar higher education (1)
Faculty. Students should have completed most or all course work (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 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) Current issues in American educational policy.

HUDF 4021. Sociology of education (3) A broad analysis of education using basic sociological concepts, including schools as organizations, socialization, stratification, and ethnic relations.

HUDK 4024. Developmental psychology: Adulthood and the life span (2-3)
Please see the Department of Human
Development for course description.
ITSF 4050. Economics of education (3)
Teaches the basic economic concepts and methods to be used for further study and analy-
sis of educational finance, education and inequality, education and economic growth, the impact of educational policies on educational outcomes, school reform, and school choice.

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)
Professors Knefelkamp, Richards, and Shipps. Please see course description under the Departmental Core Requirements at the end 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)
Drs. Gonzalez and Langer. Role and perspective changes in adulthood, concepts of maturity, learning theories, personality development, cognitive learning and thinking, creativity, interests and attitudes, motivation, self-concept, and achieving styles. Implications for the education of adults in a wide variety of workplace, community, and educational settings.

ORLJ 4002. Functions of organizations (3) 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) Please see course description in this department section.

## ITSF 4058. Economics of higher

## education (3)

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 postsecondary education.

## NURSE EXECUTIVE

Program Coordinator:
Professor Elaine La Monica Rigolosi
Program Office: (212) 678-3421
Program Email: nurseexecutives@tc.edu
Web site: www.tc.edu/o\&l/NurseExec

Nurse Executive
(Code: TNZ for M.A.) Accelerated
(Code: TNX for Ed.D.) Accelerated

## Degrees Offered:

Master of Arts (M.A.)
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 nonpartisan 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 levels 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 currently are $\$ 9,500$ per semester of study and include
tuition and refreshments. For next cohort beginning September 2006, tuition will be determined. The flat rate covers cohort courses only. The cost of the program is subject to change.

## Special Application 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 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 54 , or scaled score of 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 will begin in the fall 2008 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 Executives Program for Nurses and from Faculty Advisors. The following are examples of the Master's cohort sequence by semester.*

| Master of Arts: |  |
| :---: | :---: |
| Administration Role |  |
| Semester I |  |
| - ORL 4014 | Legal issues in healthcare organizations (3) |
| - ORL 4054 | Leadership and management in healthcare organizations (3) |
| - ORLN 4005 | Theories of nursing (3) |
| - HUDM 4120 | Basic concepts in statistics (3) |
| Semester II |  |
| - ORL 4003 | Crisis intervention (3) |
| - ORL 4011 | Personnel management in healthcare (3) |
| - ORLN 5000 | Nursing science (3) |
| - ORLN 5013 | Informatics in nursing (3) |
| Semester III |  |
| - ORLN 4013 | Fiscal management of the 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) |
| Semester IV |  |
| - ORLD 4051 | How adults learn (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:

Professorial Role
Semester I

- ORL 4054 Leadership and management in healthcare organizations (3)
- HUDM 4120 Basic concepts in statistics (3)
- ORLN 4005 Theories of nursing (3)
- ORL 4014

Semester II

- ORLN 5000
\(\left.$$
\begin{array}{ll}\text { - ORLD 4053 } & \begin{array}{l}\text { Facilitating adult learning } \\
(3)\end{array} \\
\text { - ORLN 5013 } & \begin{array}{l}\text { Informatics in nursing (3) } \\
\text { - ORL 4003 }\end{array}
$$ <br>

Crisis intervention (3)\end{array}\right]\)| Semester III | Staff development and |
| :--- | :--- |
| - ORLD 5055 | training (3) |
| - ORLN 5040ds in nursing research |  |
| - (3) |  |

## Doctor of Education

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 course work leading to the Ed.D. degree in addition to satisfactory completion of a doctoral dissertation. Program costs currently are $\$ 9,500$ 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 2008, will be determined.

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

- HUDM 4122 Probability and statistical inference (3)
- ORLN 5005 Interdisciplinary theory in nursing (3)
- ORLN 6514 Marketing nursing programs and services (3)

Semester II

- ORL 5551
- ORL 6500
- ORLN 6615

Ethics for healthcare professionals (3)
Qualitative research (3)
Colloquium in nursing administration (3)

Semester III

- A\&HF $4090 \quad$ Philosophies of education (3)
- ORLN 5043

Nursing research development (3)

| - ORLN 6522 | Policy formation and governance in health care (3) |
| :---: | :---: |
| Certification |  |
| Semester IV |  |
| - ORL 6011 | Advanced system management (3) |
| - ORLN 6540 | Dissertation design development (3) |
| - ORLN 6014 | Managing the socially responsible organization (3) |
| Semester V |  |
| - ORLN 6541 | Advanced dissertation design development (3) |
| - ORLN 5011 | Designing, planning and monitoring healthcare systems (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 course work 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 or ORLN 8900, 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 general Teachers College requirement. See General Offerings and Interdisciplinary Study for a course description.

ORL 4003. Crisis intervention (3)
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)
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)
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)
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 autumn/spring enrollment in dissertation course work the course 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) 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 education (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 research education (3) 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)
Individual advisement on doctoral dissertation following completion of all course work. Fee equal to 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 the nursing organization (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 nursing education Faculty. Permission required. Supervised practice in teaching nurse learners in one or more settings: classroom, clinical of practice.

ORLN 5530. Seminar: Clinical teaching and evaluation (3)
Faculty. Inquiry in effective strategies for teaching and evaluating students in the laboratory setting. Analysis of theory and related research.

ORLN 5910. Independent study in nursing administration (1-6)
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)
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)
Permission required. Individual, guided learning experience at the doctoral level in a selected aspect of nursing education. Topic agreed upon between student and faculty.

## POLITICS <br> AND EDUCATION

Program Coordinator:
Professor Jeffrey Henig
Program Office: (212) 678-3726
Email: henig@tc.edu
Web site: www.tc.edu/o\&l/Politics
Politics and Education
(Code: TFG)

## Degrees Offered:

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 Organization and Leadership, Teachers College and the Departments of Political Science and School of Public and International Affairs at Columbia are all
resources available to students as they develop their programs 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, 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 <br> Requirements/Information:

All applicants are required to submit GRE General test scores. Doctoral applications must include three academic letters of reference, at least two of 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 web site at www.tc.edu/o\&l/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 web site www.tc.edu/o\&l/Politics/. Courses specifically linked to the program include:

## ORLF 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.

ORLF 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.

ORLF 4043. Political thought and education (3)
Faculty. Study of the educational imperatives inherent in the classics of Western political thought.

## Intermediate

ORLF 5042. Urban politics and education (3)
Faculty. Politics in the nation's largest cities with a particular focus on educational politics and policy.

ORLF 5044. Modern political theory and education (3)
Faculty. Explores a number of educational policy issues from the perspective of contemporary political theory.

ORLF 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.

ORLF 5046. Education and politics in Western thought (3)
Faculty. Study in historical perspective of the interactions between technological innovation and education.

## Advanced

ORLF 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.

ORLF 5642. Colloquium in political economy and education (3) Faculty. Political and economic perspectives on contemporary problems of public policy and education.

ORLF 6540. Seminar in politics of education (3)
Faculty/staff. Permission required. Selected topics in the politics of education.

## Individualized Studies

ORLF 6900. Research and independent study (1-3)
Faculty/staff. Permission required.
ORLF 6940. Studies in politics and education (1-6)

ORLF 7503. Dissertation seminar (1-3) Permission required. Development of doctoral dissertation proposals.

ORLF 8900. Dissertation advisement (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.

See Education Leadership for additional courses of interest, and in particular, the concentration in Leadership, Policy and Politics.

## SOCIAL- <br> ORGANIZATIONAL PSYCHOLOGY

Program Coordinator:
Professor W. Warner Burke
Program Office: (212) 678-3249
Email: soc-org.psych@tc.edu
Web site: www.tc.edu/o\&l/SocialOrg
Psychology: Organizational
(Code: TJA)

## Degrees Offered:

Master of Arts (M.A.)
(Code: TJA)
Doctor of Philosophy (Ph.D.)
(Code: TJP)

## 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.

Two degree programs are offered: one leading to the M.A. and one leading to the Ph.D. A terminal M.A. degree in Psychology: Organizational is awarded upon successful completion of 45 points and passing the comprehensive examination. The Ph.D. degree is awarded upon completion of 86 points of planned and sequential study, qualifying papers, and a dissertation.

A certificate of attendance in conflict resolution is also offered to students in the M.A.Ph.D. programs (see non-credit program-certificate of attendance in conflict resolution, below). Students interested in receiving the certificate must complete a sequence of 5 courses and 1 semester of internship. Students who opt for the certificate of attendance 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 certificate of attendance may register for courses without completing an application form with ICCCR.

## Master of Arts

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.

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 middle or large-size organizations. These include positions in global learning, career development and counseling, organizational effectiveness, personnel research, organization development and consultation, employee relations, 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.

## Doctor of Philosophy

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 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

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 applicants is November 1st.

## Doctor of Philosophy

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

The program curriculum is comprised of major courses consisting of four required core courses, five required advanced core courses, other elective ORLJ courses, and 3 Teachers College non-ORLJ courses taken for at least 2 points each in related fields. Certain required courses may be waived depending on the person's undergraduate background, graduate study, and work experience. Additional elective credits must be substituted if required courses are waived.

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 areas of the Columbia University graduate programs 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, persons 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, unless waived by the program advisor, due to the person's background:

- ORLJ 4002 Functions of organizations (3)
- ORLJ 4005 Organizational psychology (3)
- ORLJ 4009 Understanding behavioral research (3)
- ORLJ 5003 Human resource
management (3)


## Advanced Core Required Courses:

Level 2

- ORL 5362 Group dynamics: A systems perspective (3)
- ORLJ 5045 Organizational dynamics and theory (3)
- ORLJ 5106 Psychological aspects of organizations (3)
- ORLJ 6040 Fundamentals of cooperation, conflict resolution, and mediation in different institutional contexts (3)

Plus one of the following application courses:

- ORLJ 5012 Internship in organizational psychology (2-3)
- ORLJ 5340 Basic practicum in conflict resolution (3)
- ORLJ 6343 Practicum in change and consultation in organizations (4)


## Breadth Courses:

3 non-ORLJ courses of at least 2 points each taken at Teachers College. Please consult an advisor.

## Suggested Organizational Psychology Elective/Concentration Courses:

The following courses are suggested electives within ORLJ. Students may choose from among these electives and other relevant electives that are not listed here upon consultation with an academic advisor.

| - ORLJ 5005 | Leadership and supervision (3) |
| :---: | :---: |
| - ORLJ 5012 | Organizational |
| - ORLJ 5013 | Negotiations in organizations (3) |
| - ORLJ 5017 | Small group interventions (3) |
| - ORLJ 5018 | Using survey research in organizations (3) |
| - ORLJ 5020 | Special topics: Executive coaching (1-3) |
| - ORLJ 5046 | Intercultural communications: Issues, theories, and practices (3) |
| - ORLJ 5047 | Development of the multicultural self (3) |
| - ORLJ 5310 | Preparation for coaching (3) |
| - ORLJ 6048 | Teaching to cultural and cognitive complexities (2-3) |
| - ORLJ 6343 | Practicum in change and consultation in organizations (4) |
| - ORLJ 6350 | 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 and the requisite number of credit within the grade of a $\mathrm{C}+$ or above hours. 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 matriculate from the M.A. program.

## Doctor of Philosophy

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 five 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.

- HUDM 5122 Applied regression analysis
- HUDM 5123 Linear models experimental
- HUDM 6122 Multivariate analysis I
- ORLJ 5040 Research methods in social psychology

Plus two of the following:

- HUDM 5059 Psychological measure-
- 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 Ethnography and partici-
- ORL 6500 Qualitative research methods organizations: Design and data collection
- ORL 6501 Qualitative research methods organizations: Data analysis design
- ORLJ 5041 Research methods in social psychology
Note: Probability and Statistical Inference is a prerequisite.


## Theory and Practice in SocialOrganizational Psychology (13 courses required)

Courses in this section are sub-divided into lecture, seminar, and practice courses. Of the 13 required courses, there are 7 courses that are set ( 4 lecture courses, 2 seminars, and 1 practicum). The 6 remaining courses may be selected from among the optional courses as long as 3 of the 6 courses selected are seminars.

## LECTURE

Required:

- ORLJ 4002 Functions of organizations
- ORLJ 5045 Organizational dynamics
- ORLJ 5362 Group dynamics:

A systems perspective

- ORLJ $6040 \quad$ Fundamentals of cooperation and conflict resolution
Optional:
- HUDK 5198 Psychology of instructional
- ORLJ 5005 Systems designs
supervision
- ORLJ 5018 Using survey research in
organizational consulting Data-based interventions in organizational change
- ORLJ 5046

Intercultural communication

## SEMINARS

Two required seminars:

- ORLJ $5540 \quad$ Pro-seminar in social psychology
- ORLJ 5541 Pro-seminar in organizational psychology

Plus at least 3 of the following:

- ORL 6010 Work/family issues
- ORLJ 5017 Small group intervention
- ORLJ 5047 Development of the
multicultural self
- ORLJ 6045 Demography in organizations
- ORLJ 6351 Multi-level theory in organizations
*temporary course codes have been assigned


## PRACTICE

Required:

- ORLJ 6343 Practicum: Organization change and consultation

Plus one of the following:

- ORLD 5055 Staff development
- ORLD 5061 The learning organization
- ORLJ 5310 Preparation for coaching
- ORLJ 5340 Practicum in conflict resolution
- ORLJ 6244 Fieldwork in organiza-
tional consultation
- ORLJ 6349 Process consultation

Advanced practicum in conflict resolution

## Additional Course Requirements

(3 courses required)
Suggested courses include:

- CCPJ 5020 Racism and racial identity in psychology and education
- CCPX 5034 Child developmental
- CCPX 6352 psychopathology
- CCPX 6352 Cognition, emotion
- G 4230 Sensation and perception (Columbia University)
- G 4630 Theories of personality (Columbia University)
- HUDK 5125 Cross-cultural developmental psych
- HUDK 5023 Cognitive development
- HUDK 5029 Personality development across the life span
- HUDM 5059 Psychological measurement
- ITSF 5013 Psychological anthropology
- ORL 6010 Work/family issues
- ORLD 4051 How adults learn

Dissertation-related courses:

- ORLJ 7501 Dissertation seminar (1-3)
- ORLJ 8900 Dissertation advisement
(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 work groups for the first 4 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 Workgroup (2)
- ORLJ 6346 Workgroup (2)
- ORLJ 6347 Workgroup (2)

| - ORLJ 6348 | Workgroup (2) |
| :--- | :--- |
| - ORLJ 6349 | 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 6 of the 8 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 work groups 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 work group 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 <br> - ORLJ 6640

$$
\begin{aligned}
& \text { Colloquium in social- } \\
& \text { organizational psychology } \\
& \text { (0) } \\
& \text { (Attendance required } \\
& \text { for years 1-4) }
\end{aligned}
$$

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 students 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 Attendance 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 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 5 courses and 1 semester of internship and formally applying to the Conflict Resolution Center certificate program, students may receive a non-credit Certificate of Attendance in Conflict Resolution. The courses are offered in conjunction with the ICCCR and its mission is to help individuals, schools, communities, businesses and governments better understand the nature of conflict and how to achieve its constructive resolution. The institute is currently applying for New York State approval to offer a certificate in Advanced Standing in Conflict 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)
Professor 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: $\$ 225$.

ORL 6010. Work/family issues:
A multidisciplinary approach (3)
Work/family issues are critical topics for families, employers, policymakers, and researchers/educators. They include issues such as job flexibility, parental leave, unemployment and employment transitions, telecommuting, job sharing, dual careers, and the timing of childbearing. Adopting a multidisciplinary approach, this course introduces students to the concepts the emerging field of work/ family scholarship.

ORLJ 4002. Functions of organizations (3) Faculty. 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)Professors Perry and Knefelkamp; Drs. Lutz and Richter. 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 5003. Human resource management (3)
Professor Westaby. 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 (2-3)

ORLJ 5014, 5016, 5020. Special topics in organizational psychology
New and emerging developments, practices, and concerns in the field of social-organizational psychology are examined and evaluated. Topics are announced in the schedules distributed each semester.

ORLJ 5013. Negotiations in organizations (3) Faculty. Develops skills for negotiating in organizational contexts through instruction and readings in negotiation theory and research and participation in negotiation simulations.

ORLJ 5017. Small group intervention: Theory and method (3) Professor Noumair and Dr. Brazaitis. Permission required. Prerequisite: ORL 5362, CCPJ 5362, or with permission of the instructor. This course covers relevant theory and research that underlies effective group interventions by a trainer or consultant. Methods are explored that enhance participants' learning in a training group and facilitate team building and teamwork. Intergroup dynamics are also covered.

ORLJ 5018. Using survey research in organizational consulting (3)
Professor Westaby and Dr. Tartell. 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 surveybased project from initial conceptualization to final report presentation.

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. Autumn: Experimental and quasi-experimental design. Spring: Field and survey methods; policy and evaluation research.

## ORLJ 5045. Organizational dynamics and

 theory (3)Professor Burke and 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: Theory, issues, and practices (3)
Professor Knefelkamp. 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 inter cultural 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 5106. Psychological aspects of organizations (2-3)
Professor Knefelkamp and Dr. Javitch. Prerequisite: ORLJ 4005. Examines contemporary theory, research and practice in organizational behavior. Topics include: organizational entry, socialization, motivation, reward systems, group and individual decision-making, conflict resolution, stereotyping and discrimination.

ORLJ 5147. Conflict resolution in early childhood settings (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 5310. Preparation for coaching (3) Professor Raskin. 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 5340. Basic practicum in conflict resolution (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 (3) Professor Coleman (fall) and Professor Block (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 practicum in social-organizational 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) Professor Raskin
- ORLJ 6342. Multi-level research in organizations (1-3)
Faculty.
- 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. Javitch. Permission required. Prerequisites: ORL 5362. 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: $\$ 75$.

ORLJ 6350. Advanced practicum in conflict resolution (3)
ICCCR Staff. Prerequisites: ORLJ 5340.
Limited enrollment. Students will engage in negotiation and mediation involving persons from different cultural contexts as well as with "difficult" cases.

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 each course)

ORLJ 6901. Advanced research and independent study in social-organizational psychology (1-3 each course)

ORLJ 8900. Dissertation advisement in social-organizational psychology (0) 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.


## Other Areas of Interest

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 reflect the mission of Teachers College to provide education in and out of the classroom and across the life span.

## THE CENTER FOR EDUCATIONAL OUTREACH \& INNOVATION (CEO\&I)

Founded in 1996 to extend the historic mission of Teachers College, The Center for Educational Outreach \& Innovation (CEO\&I) builds on the many and diverse talents of the Teachers College Faculty and professional staff to conduct over 250 Lifelong Learning programs each year in a variety of formats, including traditional classes and distance learning courses, institutes and lectures, symposia, conferences, film series, and debates.

The Center also hosts weekend workshops, week-long institutes, seminars, semester-long courses and certificate programs. Courses can be taken for academic credit or for non-credit. From adult education workshops to seminars on science activities for the middle school classroom, from school finance courses to an independent study focusing on using museums as a resource in art education, CEO\&I offerings span every aspect of educational theory and practice.

At CEO\&I, education is viewed as an ongoing, lifelong process of learning and development, and our courses provide opportunities for students from a diverse range of backgrounds to come together in a unique environment that encourages creativity, innovation and scholarship.

The Center for Educational Outreach and Innovation
Teachers College, Columbia University
Box 132
525 West 120th Street
New York, NY 10027-6670
Phone: (212) 678-3987
Fax: (212) 678-8417
Email: CEOI_mail@tc.columbia.edu

## 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 ICCCR, the International Center for Cooperation and Conflict Resolution, whose mission is to help individuals, schools, communities, businesses and governments better understand the nature of conflict and how to achieve its constructive resolution.

The Conflict Resolution concentration is also available to non-credit students through the Center for Educational Outreach and Innovation (CEO\&I). Students interested in receiving the ICCCR Certificate of Attendance in Conflict Resolution will have to complete a sequence of six courses.

Certificate of Attendance in Conflict Resolution

The sequence of courses leading to the Certificate of Attendance in Conflict Resolution are as follows:

- ORLJ $5340 \quad$ Basic practicum in conflict
- ORLJ 6040 resolution and mediation
- ORLJ 6040
- ORLJ 6350 Fundamentals of cooperation, conflict resolution and mediation in different institutional settings Advanced practicum in conflict resolution, Part I and II
- ORLJ Elective An ICCCR-sponsored elective course; electives vary semester to semester
- ORLJ 5012 Organizational internshipcommunity mediation

For more information regarding the Certificate of Attendance in Conflict Resolution, please contact the ICCCR Office at (212) 678-3402, or send an email to: icccr@columbia.edu and visit the web site at: www.tc.edu/icccr.

## 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 and education leadership. 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.

Unlike other schools of education in which policy studies are concentrated in one or two programs, Teachers College has six policy-related programs of study as well as several nonprogrammatic policy offerings. This breadth of programs speaks to the centrality of policy studies in the lives of so many faculty and students at Teachers College. Furthermore, Teachers College policy faculty collaborates across the college to provide students with the widest possible range of learning experiences. As we highlight on our new Education Policy Studies webpage (http://www.tc.edu/academic/edpolicy/index.asp), policy courses are offered throughout the college, and students in all programs are encouraged to take advantage of this vast array of offerings and the different levels of student engagement.

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. We refer to this as the Three Levels of Engagement in policy studies at Teachers College:

- Dabbling in Policy Study: Students enroll in individual policy courses that are open to everyone at Teachers College (see four categories of policy courses below). 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 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 Human Development) 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. (see descriptions below). These programs are: Early Childhood Education Economics and Education Education Leadership International Educational Development Politics and Education Sociology and Education

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. To help students navigate this list and find the courses across Programs and Departments that best fit their needs, we developed Four CrossDepartmental Categories of Policy Classes offered at Teachers College:

1. The Craft of Policy Making and Analysis: Within this category of policy courses, students will learn the "how" and "why" of the policy making and policy analysis processes. Most of these courses introduce students to concepts and theories of policy making and implementation that cut across different fields of social policy but that also apply to education. Examples of such courses include:

| - ORLA 4048 | Education policy: |
| :--- | :--- |
| - C\&T \& | Implementation |
| HUDF 4899 | Federal policy institute |
| - ITSF 4050 | Economics of education |
| - HUDF 5645 | Policy seminar I |
| - ITSF 4094 | International education |
|  |  |
|  | policy studies |

2. The Context and History of Educational Policy: Classes within this category of our policy curricula help students to understand the broader political and social context of education. They emphasize the historical development of educational institutions and the role of key public policies - both within the field of education and outside of it that have shaped our current schooling system. Examples of courses from this category include:

- HUDK 6036 Child and family policy seminar I \& II
- ORLA 5016 Law and educational institutions: Equity issues
- ITSF 4061 The economics of urban and minority education
- HUDF 4022 Sociology of urban education

3. Content-Driven Policy Courses - Focus on Specific Topics/Issues:
Courses in this third category focus on more specific educational policy topics/issues and provide students with an in-depth examination of these various policy domains. These courses allow students to develop a degree of expertise on critical and timely policy issues such as school finance, school choice, curriculum policy, and special education. Courses in this category include:

- ORLH 4012 The community college
- C\&T 5513/4 Seminar in early
- ITSF \& childhood education ORLA 4155 educational privatization and school choice
- ORLA 4046 School finance: Theory and practice
- C\&T 5074 Curriculum and teaching policy

4. Research Methodology Courses - Empirical Ways of Evaluating/Studying Policy:
This fourth category consists of classes designed to help students learn the methodology of policy research and evaluation. Such courses enable students to become critics and consumers of policy-related research as well as researchers in their own right. Course listings under this category include:

- HUDM 5055 Evaluation of institutions, programs and curricula I
- HUDM 5564 Survey research methods seminar
- HUDF 5646 Policy seminar II
- ITSF 4094 Evaluation of international education programs

Students who want to take more than one or two policy courses but who are not enrolled in one of the six policy-related programs (listed below) can chose to complete a College-Wide Policy Concentration. This is non-programmatic concentration - meaning that students from any program can enroll - offered through the Sociology and Education Program. Students across Teachers College can complete the specified sequence of policy courses within the Sociology and Education Program (Department of Human Development) and complete "Policy Concentration" in addition to their programmatic degree. Courses required for the concentration are:

- HUDF 4000 Education and public policy
- HUDF 5645 Policy seminar I
- HUDF 5646 Policy seminar II
- An approved content-driven policy course (see description above)

A highly recommended course for the College-Wide Policy Concentration is

- C\&T \&

HUDF 4899 Federal policy institute
And finally, for those students who want to be immersed in policy studies while completing a degree program at Teachers College, we have the Six Policy Related Programs mentioned above. Thus, rather than a single over-arching program in education policy, Teachers College offers several different, but overlapping, policy concentrations or specializations in conjunction with six master's and doctoral degree programs in Early Childhood Education, Economics and Education, Education Leadership, International Educational Development, Politics and Education, and Sociology and Education. Each is designed to help students develop policy analysis and advocacy skills while mastering an educational content area. Some core policy courses are cross-listed across concentrations and open to all students in the college. Additionally, quantitative methods courses useful for policy studies are routinely offered through the Measurement, Evaluation and Statistics Program and include evaluation design and theory, survey research, instrument development and more advanced measurement/statistics topics. Qualitative methods courses are taught in several of the college's programs and departments.

Below are brief descriptions of the six policyrelated program and their concentrations or specializations. More detailed information on each is available in this catalog under descriptions of programs and their degree requirements and at the Teachers College website.

## Six Policy-Related Programs 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
Web site: www.tc.edu/academic/C\&T/Child-Ed

Economics and Education Policy Specialization Economics and Education: Within the Department of International and Transcultural Studies; 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
Web site: www.tc.edu/its/Economics

## Leadership, Policy and Politics Concentration

 Education Leadership: Within the Department of Organization and Leadership; 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/adviser, and educational researcher. LPP coursework includes research methods and policy-craft courses in which students write policy analyses for a variety ofaudiences. The culminating master's project involves writing a policy brief for a communitybased, governmental, or private education agency on a topic of current importance. Faculty Contact: Luis Huerta;
lah2013@columbia.edu
Web site: www.tc.columbia.edu/
o\&1/ed-leadership

## 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 concentration 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
Web site: www.tc.columbia.edu/its/cie\&ied/

## Politics and Education Concentration

Politics and Education: Within the Department of Organization and Leadership; 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 governance, privatization and school choice, race and ethnicity, poverty and inequality, professionalization and bureaucratization, and testing and accountability.
Faculty Contact: Jeff Henig; henig@tc.edu Web site: www.tc.edu/o\&l/Politics

Policy Studies Concentration in Sociology Sociology and Education: Within the Department of Human Development; 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). 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: Amy Stuart Wells; asw86@columbia.edu
Web site: www.tc.edu/hud/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 schools, daycare centers, health-care and social service agencies, the media, libraries and museums, 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, Teachers College Education Zone (Professor Edmund W. Gordon, Director), The Rita Gold Early Childhood Center (Professors Leslie Williams and Susan Recchia, Co-Directors), the Center for Children and Families (Professors Sharon Lynn Kagan and Jeanne Brooks-Gunn, CoDirectors), 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 one of the faculty members listed below:
Professor Hope Jensen Leichter
Professor Hervé Varenne
Professor Jeanne Brooks-Gunn
Professor Sharon L. Kagan
Professor Victoria J. Marsick
Professor Celia Genishi
Professor Jo Anne Kleifgen
Professor Graeme Sullivan
Professor Barbara Wallace

## INTERDISCIPLINARY STUDIES IN EDUCATION

Program Coordinator:
William J. Baldwin, Associate Dean
of Academic Administration
(Code: TZT)

## 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 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.

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. 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. Fee: current Teachers College fee.

## 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.

Coursework in education law can be taken in connection with degree programs in most departments. Opportunities in education and law are not limited to the courses below. For course descriptions, please see course listing in the Department of Organization and Leadership.

ORLA 4086. Law and educational institutions: Issues of authority, religion, free speech and safety (3) Professor Heubert or Professors Sigall and Rosenberg.

ORLA 5016. Law and educational institutions: Equity issues (3)
Professor Heubert or Professor Sigall.
ORLA 5086. Judicial remedies and educational reform (3) Professor Rebell.

ORLA 5880. School Law Institute (3) Professors Heubert, Sobol and Rebell and a national faculty.

ORLA 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 Programs are available for students admitted to either Teachers College or Columbia Law School.

## 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 programs in Curriculum and Teaching offer Ed.M. and Ed.D. programs in which a concentration in Urban Education is offered 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. Institute staff and associates investigate a wide range of factors that influence educational success and failure. The Institute includes a clearinghouse and specialized library on urban education and human diversity. It provides technical assistance to schools. It provides opportunities for students and faculty to engage in research and development activities related to its scope. Some opportunities are also available for 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.


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| :---: | :---: | :---: | :---: | :---: | :---: |
| PROGRAM OF STUDY | CODE | DEGREE <br> LEVEL | PROGRAM OF STUDY | CODE | DEGREE <br> LEVEL |
| Adult Education Guided Intensive Study (AEGIS) | TDS | Ed.D. | History and Education | TFH* | M.A., Ed.M., Ed.D., Ph.D. |
| Adult Learning and Leadership | TDK* | M.A., Ed.M., Ed.D. | Inclusive Education | TYP* | M.A. |
| Anthropology and Education | TFA* | M.A., Ed.M., Ed.D., Ph.D. | Inclusive Elementary Education- <br> Dual Certification | TYP** | M.A. |
| Applied Anthropology (with |  |  | Inquiry in Education |  |  |
| Columbia Graduate School of |  |  | Leadership Practice | TAQ | Ed.D. |
| Arts and Sciences) | TFO | Ph.D. | Instructional Technology and Media | TUT | M.A., Ed.M., Ed.D. |
| Applied Educational Psychology: |  |  | Interdisciplinary Studies in Education | TZT | M.A., Ed.M., Ed.D. |
| Cognitive, Behavioral, and |  |  | International Educational |  |  |
| Developmental Analysis | TKF | Ed.M. | Development | TFZ* | M.A., Ed.M., Ed.D. |
| Applied Linguistics | TLA* | M.A., Ed.M., Ed.D. | Kinesiology | TRK | Ph.D. |
| Applied Physiology | TRA | M.A., Ed.M., Ed.D. | Learning dis/Abilities: Teaching |  |  |
| Applied Physiology and Nutrition | TZR | M.S. | Students with dis/Abilities | TEN | M.A. |
| Applied Statistics | TMX | M.S. | Literacy Specialist (Birth-Grade 6) | TYZL** | M.A |
| Art and Art Education | TGA | M.A., Ed.M., Ed.D., | Mathematics Education | TCA* | M.A., M.S., Ed.M., |
|  |  | Ed.D.C.T. |  |  | Ed.D., Ed.D.C.T., |
| Arts Administration | TGC | M.A. |  |  | Ph.D. |
| Bilingual/Bicultural Education | TLB | M.A. | Measurement and Evaluation | TMM* | Ed.M., Ed.D., Ph.D. |
| Clinical Psychology | TXC | Ph.D. | Motor Learning | TRM | M.A., Ed.M., Ed.D. |
| Cognitive Studies in Education | TKE | M.A., Ed.D., Ph.D. | Music and Music Education | TGM* | M.A., Ed.M., Ed.D., |
| Communication and Education | TUC | M.A., Ed.M., Ed.D. |  |  | Ed.D.C.T. |
| Community Nutrition Education | TSC | Ed.M. | Neuroscience Education | TKN | M.S. |
| Comparative and International |  |  | Nurse Executive (Accelerated Program) | TNZ | M.A. |
| Education | TFI* | M.A., Ed.M., Ph.D. | Nurse Executive (Accelerated Program) | TNX | Ed.D. |
| Computing in Education | TUD | M.A. | Nursing Education: Professorial Role | TNP | Ed.D. |
| Counseling Psychology | TJV | Ph.D. | Nursing Education: Professorial Role |  |  |
| Curriculum and Teaching | TYZ* | M.A., Ed.M., Ed.D. | (Cohort Program) | TNP | M.A. |
| Developmental Psychology | TKD | Ph.D. | Nutrition and Public Health | TSB | M.S., Ed.D. |
| Disability Studies in Education | TYH | M.A. | Nutrition Education | TSA | M.S., Ed.D. |
| Early Childhood Education | TYD* | M.A., Ed.M., Ed.D. | Philosophy and Education | TFP | M.A., Ed.M., Ed.D., |
| Early Childhood Special Education | TEC | M.A., Ed.M. |  |  | Ph.D. |
| Early Childhood Special Education |  |  | Physical Education | TRP | M.A. |
| (Dual Certification) | TYN | M.A., Ed.M. | Physical Education, Curriculum |  |  |
| Economics and Education | TFE | M.A., Ed.M., Ph.D. | and Teaching in | TRC | M.A., Ed.M., Ed.D. |
| Education Leadership | TAL* | M.A., Ed.M., Ed.D., Ph.D. | Politics and Education | TFG | M.A., Ed.M., Ed.D., Ph.D. |
| Education Leadership and Managemen |  |  | Psychological Counseling | TJE* | Ed.M. |
| (M.B.A. through Columbia Graduate |  |  | Psychology - Developmental | TKA | M.A. |
| School of Business) | TAA | Ed.D./M.B.A. | Psychology - Organizational | TJA | M.A. |
| Elementary/Childhood Education and |  |  | Psychology in Education (Applied Track) | TXA | M.A. |
| Learning dis/Abilities (Preservice) | TYF | Ed.M. | Psychology in Education |  |  |
| English, Teaching of | TLE* | M.A., Ed.M., Ed.D., | (General Track) | TXG | M.A. |
|  |  | Ed.D.C.T. | Reading Specialist - Applied |  |  |
| Gifted Education | TEI | M.A. | Educational Psychology | TKU* | M.A. |
| Health Education | TSD | M.A., M.S., Ed.D. | Social Studies, Teaching of | TLW | M.A., Ed.M., Ed.D., |
| Higher and Postsecondary Education | TDN | M.A., Ed.M., Ed.D. |  |  | Ph.D. |

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## Faculty Members and College Officials

## FACULTY



Harold 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.

## Selected Publications

Foundations of Music Education (Schirmer Books). "The sexstereotyping of music instruments" (Journal of Research in Music Education). "Different criteria for evaluating applied music instruction" (The Quarterly Journal of Music Teaching and Learning). "Assessing arts partnerships: Learning in and through the arts" (Handbook of Research on Music Teaching and Learning II).

## John Allegrante

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.

## Selected Publications

Pruitt, B.E., Allegrante, J.P., \& Prothrow-Stith, D. (2007).
Prentice Hall Health. Boston: Pearson Prentice Hall. Allegrante, J.P. (2004). Unfit to learn. Education Week. December 1, 2004, Vol. 24, Issue 14, p. 38. Allegrante, J.P., \& Sleet, D.A., eds. (2004). Derryberry's Educating for Health: A Foundation for Contemporary Health Education Practice. San Francisco: Jossey-Bass. Allegrante, J.P., Airhihenbuwa, C.O., Auld, M.E., Birch, D.A., Roe, K., \& Smith, B.J. (2004). Toward a unified system of accreditation for professional preparation in health education: Final Report of the National Task Force on Accreditation in Health Education. Health Education \& Behavior, 31, 668-683. Ogedegbe, G., Mancuso, C.A., Allegrante, J.P., \& Charlson, M.E. (2003).

## Randall Allsup

Assistant Professor of Music
Arts and Humanities

## Educational Background

B.M., Northwestern University; M.A., Ed.M., Ed.D., Teachers College, Columbia University

## Scholarly Interests

Instrumental music. Philosophy and arts pedagogy. Social justice and music education. Creativity. Popular culture, globalism, and music learning.

## Gregory Anderson

Associate Professor of Education Organization and Leadership

## Educational Background

B.A., M.A., University of Toronto; Ph.D., City University of New York, Minority Post-doctoral Fellow, Teachers College,
Columbia University

## Scholarly Interests

Higher education policy and reform. Race, access, and equity. Compensatory/remedial education. Comparative-International topics in higher education (with an emphasis on South Africa and the United States).

## Selected Publications

Anderson, Gregory M. "Building a People's University in South Africa: Race, Compensatory Education and the Limits of Democratic Reform". New York: Peter Lang Publishing, Inc., (2002). Anderson, Gregory M. "Access to Higher Education", Higher Education in the United States: An Encyclopedia, ed. by James JF Forest and Kevin Kinser, ABC-CLIO (2002). Anderson, Gregory M. "National liberation, Neoliberalism, and Educational Change: The Case of PostApartheid South Africa", The Journal of African American History (2003). Anderson, Gregory M., "Racial Identity, the Apartheid State and the Limits of Political Mobilization and Democratic Reform in South Africa: The Case of the University of the Western Cape", Identity: An International Journey of Theory and Research (2003). Constantine, M. G., Anderson, G. M., Berkel, L. A., Caldwell, L. D., \& Utsey, S. O. "Examining the Cultural Adjustment Experiences of African International College Students: A Qualitative Analysis". Journal of Counseling Psychology (Volume 52, No. 1, 2005). O.

## Roger Anderson

Professor of Natural Sciences
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.

## Selected Publications

Comparative Protozoology: Ecology, Physiology, Life History (Springer-Verlag).Teaching and Learning of Biology in the United States (National Science Teachers Association). "Neurocognitive models of information processing and knowledge acquisition" (Progress in Sensory Physiology). "A neurocognitive and philosophical perspective on current learning theory and science instructional strategies" (Science Education).


Thomas Bailey
George and Abby O'Neill Professor of Economics and Education Institute on Ed and Economy (IEE)
International and
Transcultural Studies

## Educational Background

B.A., Harvard University; Ph.D., Massachusetts Institute of Technology

## Scholarly Interests

Labor economics, education policy, and community colleges.

## Selected Publications

Is Student -Right-To-Know All You Should Know? An Analysis of Community College Graduation Rates (August 2006) By: Juan Carlos Calcagno, Thomas R. Bailey, Davis Jenkins, Gregory S. Kienzl \& D. Timothy Leinbach - Research in Higher Education, vol. 47(5). Hughes, K., Karp, M.M., Fermin, B, \& Bailey, T.R. (October 2005). Pathways to College Access and Success. Washington, DC: OVAE. Bailey, T. (October 2005). Implications of Educational Inequality for the Future

Work-force. Paper prepared for The Social Costs of Inadequate Education symposium. Bailey, T., Hughes, K., \& Moore, D. (2004). Working Knowledge: Work-Based Learning and Education Reform. New York: Routledge Falmer. Bailey, T. \& Morest, V.S. (2004, February). The Organizational Efficiency of Multiple Missions for Community Colleges. New York: Community College Research Center, Teachers College, Columbia University.

## John Baldacchino

Associate Professor of
Art Education
Arts and Humanities

## Educational Background

B.Ed., University of Malta; M.A., Ph.D., University of Warwick

## Scholarly Interests

Aesthetics \& Art Theory Realism, Modernity and their "afters": with focus on the work of Adorno, Lukcs, Lyotard, Vattimo and Derrida. Art Education Meanings (and "dialects") of learning as implicitly opposed to the reductionist analyses prevalent in positivist educationism. Contextual studies in the Contemporary Arts, practice within new hybrid narratives in contemporary art. Critical and Cultural Theory Lineages in the "logice of culture: focus on Gramsci and Laclau.

## Selected Publications

Baldacchino, John (text); Diggle, Jeremy, (images), Avant-Nostalgia: An excuse to pause. Unit for the Study of Philosophy in Art (USOPIA) Series, published under the auspices of the European League for the Institutes of the Arts (ELIA), Aberdeen 2002. (ISBN 1901 085 708). Baldacchino, John, Easels of Utopia: Art's Fact Returned. Ashgate, Aldershot 1998. (ISBN 184014144 X). Baldacchino, John, Post-Marxist Marxism: Difference and Realism after Lukcs and Adorno, Avebury, Aldershot 1996. (ISBN 185972438 8) Baldacchino,

John, "Hope in groundlessness: Art's denial as pedagogy" in Journal of Maltese Educational Research, University of Malta, Vol. 3, Issue 1, June 2005.

## William Baldwin

Associate Dean of Teachers College and Associate Professor of Education

## 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
Assistant 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.

## Selected Publications

Bartlett, Lesley. (fc). "To Seem and to Feel: Situated Identities and Literacy Practices." Teachers College Record. Bartlett, Lesley. (2005). "Dialogue, Knowledge, and Teacher-Student Relations:

Freirean Pedagogy in Theory and Practice." Comparative Education Review 49(3). Bartlett, Lesley. (2005) "Identity Work and Cultural Artifacts in Literacy Learning and Use: A Sociocultural Analysis." Language and Education 19(1): 1-9. Bartlett, Lesley. (2003) "World Culture or Transnational Project? Competing Educational Projects in Brazil." In Kathryn AndersonLevitt, (ed.) Local Meanings, Global Schooling: Anthropology and World Culture Theory. Palgrave Global Publishing. Bartlett, Lesley and Dorothy Holland. (2002) "Theorizing the Space of Literacy Practices." Ways of Knowing 2(1): 10-22.

Charles Basch
Richard March Hoe Professor of Health Education and Chair of the Department of Health and Behavior Studies 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.

## Selected Publications

"The effect of health education on the rate of ophthalmic examinations among African-Americans with diabetes mellitus". (American Journal of Public Health). "Using the telephone as a medium for health education" (Health Education Quarterly). "Promoting the selection of lowfat milk in elementary school cafeterias in an inner-city Latino community: Evaluation of an intervention" (American Journal of Public Health). "The Washington Heights-Inwood Healthy Heart Program: A 6-year report from a disadvantaged urban setting" (American Journal of Public Health). "Preventing AIDS through education: Concepts, strategies and research priorities" (Journal of School Health).

## Leslie Beebe

Professor of Linguistics and Education Arts and Humanities

## Educational Background

B.A., Colorado College; M.A.T., Reed College; M.A., Ph.D., University of Michigan

## Scholarly Interests

Applied Linguistics. Sociolinguistics and second language acquisition. Rude speech and social rules of speaking.

## Selected Publications

Issues in Second Language Acquisition: Multiple Perspectives (Harper and Row). English in the Cross-Cultural Era: Social Rules of Speaking and TESOL (Simul Press). "Risk-taking and the language learner" (Classroom Oriented Research in Second Language Acquisition). "Sociolinguistic variation and style shifting: Chastisement and disagreement" (Language Learning).


Lynne Bejoian
Assistant Professor of Education Curriculum and Teaching

## Educational Background

B.A., Smith College;
M.S.Ed., Ph.D., University of Southern California

## Scholarly Interests

Dis/Ability Studies in Education, students with dis/abilities, graduate students with dis/abilities, inclusion, and women \& dis/ability.

## Selected Publications

Bejoian, Lynne M. \& Reid, D. Kim (2004) "A Disability Studies

Perspective on the Bush Education Agenda: the No Child Left behind Act of 2001", Under review for publication.

## Ruth Bereson

Assistant Professor
Arts and Humanities
John Black
Cleveland E. Dodge Professor of Telecommunications
and Education
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.

## Selected Publications

Kuhn, D., Black, J.B., Kesselman, A. and Kaplan, D. (2000) The development of cognitive skills to support inquiry learning. Cognition and Instruction. Schwartz, D.L. and Black, J.B. (1996) Shuttling between depictive models and abstract rules. Cognitive Science. 20, 457-497. Schwartz, D.L. and Black, J.B. (1996) Analog imagery in mental reasoning: Depictive models. Cognitive Psychology. 30, $154-$ 219. Robertson, S.P., Zachery, W.A., and Black, J.B. (Ed.) Cognition, Computing and Cooperation. Norwood, NJ: Ablex, 1990. Galambos, J.A., Abelson, R.P., and Black, J.B. (Eds.) Knowledge Structures. Hillsdate, NJ: Erlbaum (1986)

## 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.

## Selected Publications

Roberson, L., Deitch, E.A., Brief, A.P. \& Block, C.J. (2003). Stereotype threat and feedback seeking in the workplace. Journal of Vocational Behavior, 62, 176 188. Roberson, L. \& Block, C.J. (2001) Explaining racioethnic group differences in performance and related outcomes: A review of theoretical perspectives. In B. Staw \& R. Sutton (Eds.), Research in Organizational Behavior. JAI Press., Pp. 247-326. Katz, T. \& Block, C.J. (2000). Process and outcome goal orientations in conflict situations: The importance of framing. In M. Deutsch \& P. Coleman (Eds.), Handbook of Conflict Resolution: Theory and Practice. Jossey-Bass. Block, C.J. \& Carter, R.T. (1998). White racial identity: Theory, research, and implications for organizational contexts. In A. Daly (Ed.), Workplace Diversity: Issues and Perspectives. NASW Press. Heilman, M.E, Block, C.J. \& Stathatos, P. (1997). The affirmative action stigma of incompetence: Effects of performance information ambiguity. Academy of Management Journal, 40, 603-625.

## George Bonanno

Associate Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., Hampshire College; Ph.D., Yale University

George Bond
William F. Russell Professor of Anthropology and Education and Department Chair 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.

## Selected Publications

The Politics of Change in a Zambian Community (Chicago University Press). African Christianity (Academic Press, co-ed.). The Social Construction of the Past (Routledge). AIDS in Africa and the Caribbean (Westview). Witchcraft Dialogues (Ohio University Press). Contested Terrains and Constructed Categories (Westview).


James Borland
Professor of Education and Chair of the Department of Curriculum and Teaching 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.

## Selected Publications

Planning and Implementing Programs for the Gifted (Teachers College Press). Rethinking Gifted Education (Teachers College
Press). "Gifted education and the threat of irrelevance" (Journal for
the Education of the Gifted). "Identifying young, potentially gifted, economically disadvantaged students" (Gifted Child Quarterly). "The construct of giftedness" (Peabody Journal of Education).

## Marla Brassard

Associate 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. Psychological aggression in the teacher-student and peer relationships and its impact on children's functioning as part of a longitudinal study of 800 secondary school children followed from middle school through high school.

## Selected Publications

Brassard, M.R., \& Boehm, A.E. (2006). Preschool assessment: Principles and practices. New York: Guilford Press. MorrisRothschild, B., \& Brassard, M.R. (2006). Teachers' conflict managment styles: The role of attachment styles and classroom managment efficacy. Journal of School Psychology, 44 (2), 105121. Brassard, M.R., \& Donovan, K. M. (2006). Defining psychological maltreatment. In M. Feerick, J. F. Knutson, Trickett, P. K., \& Flanzer, S. (Eds.), Child abuse and neglect. Baltimore, MD: Brookes Publishing. Brassard, M.R., \& Rivelis, R. (2006). Psychological and physical abuse. In G. Bear \& K. Minke (Eds.), Children's Needs III: Understanding and Addressing the Developmental Needs of Children. Washington, DC: NASP. Binggeli, N., Hart, S., \& Brassard, M.R. (2001). Psychological maltreatment of children (Child abuse and neglect series). Newbury Park, CA: Sage.


Alicia Broderick
Assistant Professor of Education Curriculum and Teaching

## Selected Publications

Broderick, A., Mehta, H., \& Reid, D. K. (in press). Differentiating instruction for disabled students in inclusive classrooms. Theory into Practice (44)3, 194-202. Broderick, A., Reid, D. K., \& Valle, J. (in press). Disability studies in education and the practical concerns of teachers. In S. Danforth \& S. Gabel (Eds.), Disability studies in education: Crucial questions. Peter Lang. Kasa-Hendrickson, C., Broderick, A., \& Biklen, D. (in review). Sorting out speech: Understanding multiple methods of communication for persons with significant disabilities. Research and Practice for Persons with Severe Disabilities. Broderick, A. \& Kasa Hendrickson, C. (in review). "I am so much more real than retarded": Deconstructing assumptions about speech and its relationship to competency. Equity \& Excellence in Education. Biklen, D., KasaHendrickson, C.; Broderick, A.; Gambell, J. (producers); \& Burke, J. (writer). (2002). Inside the edge: A journey to speech through typing. (video). (Syracuse University.) (Awarded 2002 TASH Vision Award for positive portrayal of individuals with significant disabilities.)

## 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.

## Selected Publications

Early Child Development in the 21st Century: Profiles of Current Research Initiatives. (Teachers College Press, co-author). Neighborhood Poverty: Context and Consequences for Children (Volume 1). Policy Implications in Studying Neighborhoods (Volume 2). (Russell Sage Foundation Press co-author). "Do you believe in magic?: What we can expect from early childhood intervention Programs" (Social Policy Report, Society for Research in Child Development, 17 (1), 1-14.) "The effects of early maternal employment on child cognitive development" (Child Development, 73 (4), 1052-1072, co-author).
"Transitions and turning points: Navigating the passage from childhood through adolescence." (Developmental Psychology, 32(4), 768-776, co-author).

## John 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. Education and violence. Masculinity and war. Unconscious fantasies about technology. Youth subcultures. Cinema as educator. Achievement Gap in Humanities/Arts.

## Selected Publications

Critical Theories of Psychological Development (Plenum Press). "Smart weapons and military TV" (Technoscience and Cyber-culture).
"The experience of the father" (Insights). "Hollywood ultra-
violence as educator" (Psychoanalysis and Education).
"What the transgender child teaches us." (Bank Street College Occasional Papers).

W. Warner Burke

Edward Lee Thorndike Professor of Psychology and Education 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.

## Selected Publications

Organization Development: A Process of Learning and Change (Addison-Wesley). Organization Change: Theory and Practice (Sage Publications). Business Climate Shifts: Profiles of Change Makers (with W. Trahant) (Butterworth Heinzmann). "The New Agenda for Organizational Development" (Organizational Dynamics).

## Judith 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.

## Selected Publications

"The practice of teaching in K-12 schools: Devices and desires"
(The Handbook of Research and Policy in Art Education, NAEA). "The configuration of meaning: Learner centered art education" (Studies in Art Education). "Learning in and through the arts: The question of transfer" (Studies in Art Education). "Natural allies: Children, teachers and artists" (Beyond Enrichment, ACA). "The arts in school reform: Other conversations" (Teachers College Record).

## Lucy Calkins

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 and school reform.

## Selected Publications

Calkins, L. (2003). Units of Study for Primary Writing: A Yearlong Curriculum. Portsmouth, NH: first-handHeinemann. Calkins, L. (2000). The art of teaching reading. Boston: Allyn \& Bacon. Calkins, L. (1998). A teacher's guide to standardized reading tests: Knowledge is power (with D. Statman and K. Montgomery). Portsmouth, NH: Heinmann Educational Books. Calkins, L. (1997). Raising lifelong learners: A parent's guide. Redding, MA: Addison, Wesley \& Longman. Calkins, L. (1998). The art of teaching writing. Portsmouth, NH: Heinemann Educational Books.


Robert 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

## Selected Publications

Carter, R.T. (Ed.). (2005).
Handbook of racial-cultural psychology and counseling: Theory and research (Vol. 1). Hoboken, NJ: Wiley. Carter, R.T. (Ed.). (2005). Handbook of racial-cultural psychology and counseling: Training and practice (Vol. 2). Hoboken, NJ: Wiley. Wallace, B. C. and Carter, R.T. (Eds.). (2003). Understanding and dealing with violence: A multicultural approach. Thousand Oaks, CA: Sage. Third volume in the Roundtable Series on Multicultural Psychology and Education Carter, R.T. (Ed.). (2000). Addressing cultural issues in organizations: Beyond the corporate context. Thousand Oaks, CA: Sage. Carter, R.T. (2005).

## Madhabi Chatterji

Associate Professor of
Education Leadership
Organization and Leadership

## Educational Background

B.Ed., University of Bombay; B.Sc., University of Calcutta; M.Ed., University of Madras; Ph.D., University of South Florida

## Scholarly Interests

Development and validation of construct measures with classical and Rasch measurement models. Evaluation models and methods. Standards-based educational reforms. Designing classroom, school, and institutional assessment systems.

## Selected Publications

Chatterji, M. (in press). Achievement gaps and correlates of mathematics achievement: Evidence from the ECLS K-first grade sample. Educational Policy Analysis Archives. Chatterji, M. (2004). Evidence on "what works": An argument for extend-ed-term mixed method (ETMM) evaluation designs. Educational Researcher, 33(9), 3-13. Chatterji, M. (2003). Designing and Using Tools for Educational Assessment. Boston, MA: Allyn \& Bacon. http://www.columbia. edu/~mb1434/EdAssess.htm Chatterji, M. (2002). Models and methods for examining stan-dards-based reforms: Have the tools of inquiry answered the pressing questions on improving schools? Review of Educational Research, 72, (3), 345-386. Chatterji, M., Sentovich, C, Ferron, J., \& Rendina-Gobioff, G. (2002). Using an iterative validation model to conceptualize, pilot-test, and validate scores from an instrument measuring Teacher Readiness for Educational Reforms. Educational and Psychological Measurement, 62, 442-463.

Renee Cherow-Oleary
Assistant Professor of
English Education
Arts and Humanities

## Educational Background

B.A., Barnard College; M.A.T., University of Chicago; Ph.D., New York University

## Scholarly Interests

Pedagogy and theory in the teaching of language, reading, writing, literature, performing arts and media; Media literacy and social impact of mass media/popular culture, especially in the lives of children and ado-
lescents; Creating educational media for children, parents and teachers; Epistemology, interdisciplinary and curriculum development for the 21st Century; Peace education, human rights education and transformative learning.

## Selected Publications

Education for the 21st Century: New Curricular Paradigms-book in progress "Multimedia Texts and Media Literacy: Approaches to Educational Research for the 21st Century," presentation at Ways of Knowing Conference, Teachers College, 2004. Article in process. "From the Teletubbies to Six Feet Under: Portrayals of the Life Cycle on Television," presentation at the National Media Education Conference, 2003. Article developed from this presentation. "Life After Death in Popular Culture: Recent TV, Books and Films About Reincarnation," presentation at Beginnings and Endings Psychoanalytic Conference in Dublin, Ireland, 2002. Article in process "Interactivity in Children's Television," A Report Commissioned by the Disney Channel in conjunction with the M.I.T. Media Lab, 2001.

## Peter Coleman

Assistant 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 an social conditions which foster the use of constructive social power.

## Selected Publications

Coleman, P. T., Vallacher, R., Nowak, A., \& Bui-Wrzosinska (forthcoming). Intractable Conflict as an Attractor: Presenting a

Dynamical of Conflict, Escalation, and Intractability. American Behavioral Scientist Coleman, P. T., Bui-Wrzosinska, L., Vallacher, R., \& Nowak, A. (in press). Approaching Protracted Conflicts as Dynamical Systems: Guidelines and Methods for Intervention. In A. Schneider \& C. Honeyman (Eds.), The Negotiator's Fieldbook. Chicago: American Bar Association Books. Deutsch, M., Coleman, P. T., \& Marcus, E. (Eds.). The Handbook of Conflict Resolution: Theory and Practice, Second Edition. San Francisco: JosseyBass. Coleman, P. T. (2004) Paradigmatic framing of protracted, intractable conflict: Towards the development of a metaframework - II. Peace and Conflict: Journal of Peace Psychology, 10 (3), 197-235.

## 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.

## Selected Publications

The Complete Caribbeana 19001975: A Bibliographic Guide to the Scholarly Literature (4 vols., Kraus Thomson). Ganja in Jamaica: A Medical Anthropological Study of Chronic Marihuana Use (Mouton). West Indian Perspectives (4 vols., Anchor Press/Doubleday). Interdisciplinary Research and Doctoral Training: A Study of the Link_ping University (Sweden) Tema Departments (Swedish National Board of Universities and Colleges).

## Madonna Constantine

Professor of Psychology
and Education
Counseling and
Clinical Psychology

## Educational Background

B.S., M.A., Xavier University of Louisiana; Ph.D., University of Memphis

## Scholarly Interests

Cultural competence in counseling, training, and supervision. Mental health issues of people of color in the United States and immigrants. Vocational issues of adolescents and college students of color.

## Selected Publications

Constantine, M. G., \& Sue, D. W. (Eds). (2006). Addressing Racism: Facilitating Cultural Competence in Mental Health and Educational Settings. Hoboken, NJ: Wiley \& Sons. Smith, T. B, Constantine, M. G., Dunn, T. W., Dinehart, J. M., \& Montoya, J. A. (2006). Multicultural Education in the Mental Health Professions: A MetaAnalytic Review. Journal of Counseling Psychology, 53, 132 145. Constantine, M. G., \& Sue, D. W. (Eds). (2005). Strategies for Building Multicultural Competence in Mental Health and Educational Settings. Hoboken, NJ: Wiley \& Sons. Constantine, M. G., Warren, A. K., \& Miville, M. L. (2005). White Racial Identity Dyadic Interactions in Supervision: Implications for Supervisees' Multicultural Counseling Competence. Journal of Counseling Psychology, 52, 490-496. Miville, M. L., Constantine, M. G., Baysden, M. F., So-Lloyd, G. (2005). Chameleon Changes: An Exploration of Racial Identity Themes of Multiracial People. Journal of Counseling Psychology, 52, 507-516.

## 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 factors influencing food choice and decision-making processes, particularly among children and adolescents; children's and adolescents' understandings of the impact of food and food systems on the environment; development and evaluation of nutrition education curricula and programs.

## Selected Publications

"Cognitive, motivational, social and environmental influences on children's food choices" (Health Psychology). "Food choice criteria of adolescents: Role of weight and dieting status" (Appetite). "Effectiveness of nutrition education and implications for nutrition education policy, programs and research: A review of research" (Journal of Nutrition Education). "Adolescents' perspectives and food choice behaviors in relation to the environmental impacts of food production practices" (Journal of Nutrition Education). Usefulness of psychosocial theory variables in explaining fat-related dietary behavior in Chinese Americans: Association with degree of acculturation. (Journal of Nutrition Education).


James Corter
Associate Professor of
Statistics and Education and Chair of the Department of Human Development Human Development

## Educational Background

B.A., University of North Carolina; Graduate study, L. L., Thurstone Psychometric Laboratory, University of North Carolina; Ph.D., Stanford University

## Scholarly Interests

Computational models of human learning and categorization. Statistics expertise and probability problem-solving. Judgment and decision-making. Clustering and scaling methods for multivariate data.

## Selected Publications

Nickerson, J. V., Corter, J. E., Esche, S. K., \& Chassapis, C. (in press). A model for evaluating the effectiveness of remote engineering laboratories and simulations in education. Computers and Education. Corter, J. E., \& Chen, Y.-J. (in press). Do investment risk tolerance attitudes predict portfolio risk? Journal of Psychology and Business. Chen, Y.-J., \& Corter, J. E. (2005). When mixed options are preferred in multiple-trial decision making. Journal of Behavioral Decision Making, 18, 1-26. Corter, J. E. (2005). Additive trees. In B. Everitt \& D. Howell (Eds.), Encyclopedia of Statistics in the Behavioral Sciences. London: Wiley. Tatsuoka, K. K., Corter, J. E., \& Tatsuoka, C. (2004). Patterns of diagnosed mathematical content and process skills in TIMSS-R across a sample of twenty countries. American Educational Research Journal, 41(4), 901-926.

Margaret Crocco
Associate Professor of Social Studies and Education Arts and Humanities

## Educational Background

B.A., Georgetown University; M.A., Ph.D., University of Pennsylvania

## Scholarly Interests

Diversity issues in social studies education. History of citizenship education. Technology and the social studies. Teacher education.

## Selected Publications

Social Studies and the Press: Keeping the Beast at Bay? (Information Age Publishers, 2005). Learning to Teach in an Age of Accountability. (Lawrence Erlbaum Associates) "Bending the Future to Their Will": Civic

Women, Social Education, and Democracy (Rowman and Littlefield). Pedagogies of Resistance: Women Educator Activists, 1880-1960 (Teachers College Press). "Teaching Shabanu: The Challenges of Using World Literature in the Social Studies Classroom" (Journal of Curriculum Studies).

## Lori Custodero

Assistant 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.

## Selected Publications

Custodero, L. A. Britto, P. R., \& Brooks-Gunn, J. (2003). Musical lives: A collective portrait of American families. Journal of Applied Developmental Psychology, 24(5). 553-572. Custodero, L. A., \& Johnson Green, E. A. (2003). Passing the cultural torch: Musical experience and musical parenting of infants. Journal of Research in Music Education, 51(2), 102-114. Custodero, L. A. (2003). Perceptions of challenge: A longitudinal investigation of children's music learning. Arts and Learning, 19, 23-53. Custodero, L. A. (2002). The musical lives of young children: Inviting, seeking, initiating. Journal of Zero-toThree. 23(1), 4-9. Custodero, L. A., Britto, P. R., \& Xin, T. (2002). From Mozart to Motown, lullabies to love songs: A preliminary report on the Parents Use of Music with Infants Survey. Journal of Zero-to-Three 23(1), 41-46.

## Ronald De Meersman

Professor of Applied
Physiology and Education
Biobehavioral Studies

## Educational Background

B.S., M.S., University of Utah; Ph.D., Indiana University

## Scholarly Interests

Modulators of autonomic outflow. The effects of aerobic improvements on autonomic and blood pressure regulation. Noninvasive assessment of physiologic data.

## Selected Publications

"Influence of respiration on metabolic, hemodynamic, psychometric, and R-R Interval Spectral Parameters" (American Journal of Physiology). "Vagal Withdrawal as a function of audience" (American Journal of Physiology). "Deriving respiration from Pulse Wave: A new signalprocessing technique" (American Journal of Physiology). "Effect of provocative maneuvers on heart rate variability in subjects with paraplegia" (American Journal of Physiology). "Estrogen and vascular stiffness" (American Journal of Physiology).

## 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, item response theory.

## Selected Publications

DeCarlo, L. T. (in press). On bias in magnitude scaling and some conjectures of Stevens. Perception \& Psychophysics. DeCarlo, L. T. (2005). A model of rater behavior in essay grading based on signal detection theory. Journal of Educational Measurement, 42, 53-76. DeCarlo, L. T. (2003). An application of signal detection theory with finite mixture distributions to source dis-
crimination. Journal of Experimental Psychology: Learning, Memory, \& Cognition, 29, 767778. DeCarlo, L. T. (2003). Source monitoring and multivariate signal detection theory, with a model for selection. Journal of Mathematical Psychology, 47, 292-303. DeCarlo, L. T. (2003). Using the PLUM procedure of SPSS to fit unequal variance and generalized signal detection models. Behavior Research Methods, Instruments, \& Computers, 35, 49-56.

## Kevin Dougherty

Associate Professor of Higher
Education and Senior Research
Associate, Community College Research Center
Organization and Leadership

## 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. Prof. Dougherty's current research is focused on state policies affecting access to, and success in, community colleges by minority and low-income students. The project, which is being funded by the Lumination Foundation for Education, is interviewing community college policy makers in all 50 states. In the past, Professor Dougherty has done extensive research and writing on the historical origins and impact on students of community colleges, the performance accountability movement in higher education, the role of higher education in economic development, and reform movements in elementary and secondary education (especially school choice, charter schools, and performance standards).

## Selected Publications

"Performance Accountability as Imperfect Panacea: The Community College Experience" (with Esther Hong). Forthcoming in Thomas Bailey and Vanessa Smith Morest (eds.), Defending the Community College Equity

Agenda "Necessary but not Sufficient: Higher Education Reform as a Strategy of Social Mobility" (with David Karen). In Gary Orfield and Patricia Marin (eds.), Higher Education and the Color Line. Cambridge, MA: Harvard Educational Publishing Group, 2005. "It's Not Enough to Get Through the Open Door: Inequalities by Social Background in Transfer from Community Colleges to Four-Year Colleges" (with Greg Kienzl).

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 K 12 schools and adult education settings (domestically and internationally). Adult learning and literacy. Enhancing doctoral research training. Qualitative research methodology.

## Selected Publications

Drago-Severson, E. (2004). Becoming Adult Learners: Principles and Practice for Effective Development. New York: Teachers College Press. Drago-Severson, E. (2004). Helping Teachers Learn: Principal Leadership for Adult Growth and Development. Thousand Oaks, CA: Corwin Press. Awarded National Staff Development Council's 2004 Book of the Year. DragoSeverson, E. (forthcoming). Helping teachers learn: Principals as professional development leaders. To appear in Teachers College Record. Drago-Severson, E. (2005). How Principals Help Teachers Learn and Grow: Practices and Principles for Effective and Sustaining Professional Development. The Texas Principals' and Supervisors'

Newsletter, 1-10. Drago-
Severson, E., \& Santos, M.
(2005). Adult Learning and Development Today. In D. Ness (Ed.), Encyclopedia on Education and Human Development. M. E. Sharpe Publishers.

## 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.

## Catherine Embree

Assistant Professor of
Higher Education
Organization and Leadership
Barry 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 supervisors; self-disclosure in children; Burn-out in teaching and the helping professions.

## Selected Publications

The Psychotherapy of Carl Rogers (Guilford). Crisis in American Education: Stress and Burnout in the American Teacher (Jossey-Bass). "Gender and representation in psychotherapy" (Psychotherapy). "The therapist as attachment figure" (Psychotherapy). "Disclosure to therapists: What is and is not discussed in psychotherapy" (Journal of Clinical Psychology).

## Clea Fernandez

Assistant Professor of Psychology and Education
Human Development

## Educational Background

B.A., Barnard College; Ph.D., University of Chicago

## Scholarly Interests

Primary interest: The development of mathematical thinking in school settings with a special emphasis on cross-cultural comparisons and on understanding what knowledge base teachers need to teach mathematics effectively and how they can be supported in developing such a knowledge base. Secondary interest: Parents' views of their children's intellectual development and how they can support it, particularly in the area of mathematics.

## Selected Publications

Fernandez, C. (2003). Learning from Japanese approaches to professional development: The case of lesson study. Journal of Teacher Education, 53(5), 393405. Fernandez, C., Cannon, J., \& Chokshi, S. (2003). A U.S.Japan lesson study collaboration reveals critical lenses for examining practice. Teaching and Teacher Education, 19(2), 171185. Fernandez, C. \& Chokshi, S. (2002). Translating lesson study for a U.S. context: Practical information and advice for teachers interested in conducting lesson study. Phi Delta Kappan, 54(2), 128-134. Stigler, J.W., Fernandez, C. \& Yoshida, M. (1996). Cultures of mathematics instruction in Japanese and American elementary classrooms. In T.P. Rohlen and G.R. Le Tendre (Eds.) Teaching and learning in Japan. Cambridge, England: Cambridge University Press. Stigler, J.W., \& Fernandez, C. (1995). Learning mathematics from classroom instruction: Cross-cultural and experimental perspectives.

## Karen Froud

Assistant Professor of Speech
and Language Pathology
Biobehavioral Studies

## Educational Background

B.Sc., Central School of Speech and Drama; M.A., Ph.D., University College London

## Selected Publications

Froud, K. (submitted) Unaccusativity as lexical argument reduction: evidence from aphasia. Under review. Gardner, H., Froud, K., McLelland, A. \& van der Lely, H.K.J. (submitted). The development of the Grammar and Phonology Screening (GAPS) test to assess key markers of specific language difficulties in young children. Under review. Bury, D., Froud, K., Horsey, R. \& Szendroi, K. (Eds.) (2004). Focus and the interaction between syntax and pragmatics. Lingua, 114, 3, 227-388. Druks, J. \& Froud, K. (2002) The syntax of single words: evidence from a patient with a function word deficit. Cognitive Neuropsychology, 19(3), 207244. Froud, K. (2001) Prepositions and the lexical / functional divide: aphasic evidence. Lingua, 111, 1-28.

Ofelia Garcia
Professor and Coordinator of Program in Bilingual/Bicultural Education
International and
Transcultural Studies

## Educational Background

B.A., M.A., Hunter College, CUNY; Ph.D., Graduate Center, City University of New York

## Selected Publications

Garcia, Ofelia, Tove SkutnabbKangas and Mara Torres-Guzmn, eds. In press. Imagining Multilingual Schools: Language in Education and Glocalization. Clevedon: Multilingual Matters. Garcia, Ofelia, Rakhmiel Peltz and Hal Schiffman, eds. In press. Language Loyalty, Continuity and Change: Joshua A. Fishmans Contributions to International Sociolinguistics. Clevedon: Multilingual Matters. Garcia, Ofelia and Colin Baker, eds. In press. A Bilingual Education Reader. Clevedon, UK: Multilingual Matters. Garcia, Ofelia and Joshua A. Fishman, eds.
1997. (2001, 2nd edition). The Multilingual Apple. Languages in New York City. Berlin: Mouton de Gruyter. Garcia, Ofelia and Colin Baker, eds. 1995. Policy and Practice in Bilingual Education. Extending the Foundations. Clevedon, Avon: Multilingual Matters.

## 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.

## Selected Publications

Ways of Assessing Children and Curriculum: Stories of Early Childhood Practice (Teachers College Press). The Need for Story: Cultural Diversity in Classroom and Community (National Council of Teachers of English). "Talking their way into print: English language learners in a pre-kindergarten classroom" (Beginning Reading and Writing).
"Teaching in early childhood education: Understanding practices through research and theory" (Handbook of Research on Teaching, 4th ed.).

## Antoinette Gentile

Professor of Psychology and Education
Biobehavioral Studies

## Educational Background

B.S., Brooklyn College, CUNY; M.S., P.E.D., Indiana University; Ph.D., SUNY, Stony Brook

## Scholarly Interests

Motor learning and development. Neuromotor control processes. Rehabilitative strategies.

## Selected Publications

"Instructional cues and Parkinsonian gait" (Neurological Report, co-author). "Prehension in children with Down's syndrome"
(Acta Psychologica, co-author). "Exercise program for individuals with Parkinson's disease: Effects of functional ability and quality of life" (Neurological Report, coauthor). "Skill acquisition: action, movement and neuromotor processes" (Movement Sciences: Foundation for Rehabilitation in Physical Therapy, 2nd ed.).
"Implicit and explicit processes during acquisition of functional skills" (Scand. J. Occupational Therapy).

## Martha Gephart

Research Associate Professor
of Education and Co-Director,
J.M. Huber Institute for

Learning in Organizations
Organization and Leadership

## Educational Background

B.A., Stanford University;
M.A., Ph.D., Columbia

University

## Scholarly Interests

Learning and performance in organizations. Organizational and community contexts that promote effective learning and development. Assessment of organizational learning and links to performance in diverse organizational and inter-organizational settings. Evaluation of programs and interventions in complex organizational settings.

## Selected Publications

"Measuring Learning Linked to Performance" (Performance Measurement and Management: Research and Action). "Learning Organizations Come Alive" (Training and Development). "The Road to High Performance" (Training and Development).
"Neighborhoods and Communities as Contexts for Development" (Neighborhood Poverty: Context and Consequences for Children). The Organizational Characteristics of Supportive Environments for Youth (Public/Private Ventures).


Herbert Ginsburg
Jacob H. Schiff Foundation
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;

## Selected Publications

Ginsburg, H.P., Jacobs, S.F., \& Lopez, L.S. (1998). The teacher's guide to flexible interviewing in the classroom: Learning what children know about math. Boston: Allyn and Bacon. Ginsburg, H.P. (1997). Entering the child's mind: The clinical interview in psychological research and practice. NY: Cambridge University Press. Ginsburg, H.P. (1989). Children's Arithmetic. (2nd Ed.) Austin, TX: Pro-Ed. Ginsburg, H.P. \& Opper, S. (1988). Piaget's Theory of Intellectual Development. (3rd Ed.) Englewood Cliffs, NJ: Prentice-Hall.

## Anne Goodwin

Associate Professor of 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.

## Selected Publications

Goodwin, A. L. (2003). Growing up Asian in America: A search for self. In C. C. Park, A. L. Goodwin and S. J. Lee, (Eds). Asian American identities, families and Schooling (pp. 3-26). Greenwich, CT: Information Age Publishing Inc. Park, C. C., Goodwin, A. L., and Lee, S. J. (Eds.). (2003). Asian American identities, families and schooling.Greenwich, CT: Information Age Publishing Inc. Goodwin, A. L. (2002). The social/political construction of low teacher expectations for children of color: Re-examining the achievement gap. Journal of Thought, 37(4), 83-103. Goodwin, A. L. (2002). The case of one child: Making the shift from personal knowledge to professionally informed practice. Teaching Education, 13(2), 137-154. Goodwin, A. L. (2002). Teacher preparation and the education of immigrant children. Education and Urban Society, 34(2), 156172.

## Andrew Gordon

Professor of Movement Sciences and Education
Biobehavioral Studies

## 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 and Language Pathology Biobehavioral Studies

## 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, Magnetic Resonance Imaging of brain functioning in language processing. Field Re search Piraha villages, Maici River, Amazonia, Brazil: June 1991; June - August 1992; June 1993. Kadiweu reservation, Matto Grosso do Sul, Brazil: August, 1995

## Selected Publications

Ganger, J., Dunn, S. \& Gordon, P. (2005) Genes take over when the input fails: Findings from a twin study of the passive. Online proceedings of the 27th Boston University Conference on Language Development. Miozzo, M. \& Gordon, P. (In press, 2005) Facts, Events and Inflection: When Language and Memory Dissociate, Journal of Cognitive Neuroscience. Gordon, P. (2005) Author's Response to "Crying Whorf". Science, 307, 1722. Gordon, P. (2004) Numerical Cognition without Words: Evidence from Amazonia. Science, 306, 496-499. First appeared in Science Express, online publication August 16th 2004. Gordon, P. (2004) Supplementary online materials to "Numerical Cognition without Words: Evidence from Amazonia." Science Online. http://www.sciencemag.org/cgi/ content/full/1094492/DC1

Douglass R. 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

## Selected Publications

Greer, R. D. (2002). Designing teaching strategies: An applied behavior analysis systems approach. New York: Academic Press. Gary Phye (Series Editor), Educational Psychology Series: Critical Reviews of Research Knowledge, Theories, Principles, and Practices. (Selected to be available online as well as in print by Elsevier Press). Greer, R. D., \& Ross, D. E., (in press). Verbal behavior analysis: Developing and expanding complex communication in children severe language delays. Boston: Allyn \& Bacon. Greer, R. D., Ross, D., Singer-Dudek, J. Keohane, D., Nuzzolo, \& Chavez-Brown, M. (In Progress). Teaching as Applied Behavior Analysis: A Student-Centered Science of Instruction, Motivation, and Management (Tentative Title $12 / 26 / 04$ ). Under Contract for Publication by Allyn \& Bacon, Scheduled for Publication in 2007/8 Experimental Research Articles Published 2006 (as of February 2006) Tsai, H. \& Greer, R. D. (2006). Conditioned preference for books and faster acquisition of textual responses by preschool children. Journal of Early and Intensive Behavioral Interventions.3.1, 35-60.

## George Gushue

Assistant 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.

Selected Publications
School Counselors' Ethnic Tolerance Attitudes and Racism Attitudes as Predictors of their Multicultural Case Conceptualization of an Immigrant Student Madonna G. Constantine, George V. Gushue. Journal of Counseling and Development: JCD. Alexandria: Spring 2003.Vol.81, Iss.2; pg. 185 Lazarus and Group Psychotherapy: AIDS in the Era of Protease Inhibitors. Gushue, George V. Brazaitis, Sara J. Counseling Psychologist; Sage Publications, US. May 2003. Vol. 31, Iss. 3; pgs. 314-342 Examining Individualism, Collectivism, and Self-Differentiation in African American College Women. George V. Gushue, Madonna G. Constantine. Journal of Mental Health Counseling. Alexandria: Jan 2003. Vol. 25, Iss. 1; p. 1 (15 pages) Remember-ing Race: White Racial Identity Attitudes and Two Aspects of Social Memory. Gushue, George V. Carter, Robert T. Journal of Counseling Psychology. Apr 2000. Vol. 47, Iss. 2; pgs. 199-210

## Sally Hage

Assistant Professor of Psychology and Education Counseling and Clinical Psychology

## Educational Background

B.A., University of St. Thomas; M.Div., University of Notre Dame; Ph.D., University of Minnesota

## Scholarly Interests

Prevention in Counseling Psychology, Spiritual Diversity and Multicultural Counseling Competency, Training, Dating Violence Prevention

## Britt Hamre

Assistant Professor of Education Curriculum and Teaching

Zhao Hong Han
Associate Professor of
Linguistics 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.

## Selected Publications

Han, Z-H. (2006). Fossilization: Can grammaticality judgment be a reliable source of evidence? In Z-H. Han \& T. Odlin (Eds.), Studies of Fossilization in Second Language Acquisition (pp. 5682). Clevedon: Multilingual Matters. (A seven-year longitudinal study) Han, Z-H. (2004). "To be a native speaker means not to be a non-native speaker." Second Language Research. 20(2), 16687. Han, Z-H. (2004). Fossilization in Adult Second Language Acquisition. Clevedon: Multilingual Matters. (Review by Kupferberg(2005). Studies in Second Language Acquisition, 27(4), 627-629) Han, Z-H. (2002). A study of the impact of recasts on tense consistency in L2 output. TESOL Quarterly, 36(4), 543-72. Han, Z-H. (2000). Persistence of the implicit influence of NL: The case of the pseudo-passive. Applied Linguistics, 21(1), 78105.

David 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.

## Selected Publications

Exploring the Moral Heart of Teaching: Toward a Teacher's Creed (Teachers College Press). "Teaching as a Moral Activity" (Handbook of Research on Teaching, 4th ed.). "The Moral Environment in an Inner-City Boys' High School" (Teaching and Teacher Education). "WellFormed, not Well-Filled: Montaigne and the Paths of Personhood" (Educational Theory).


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 atrisk populations. Psychological anthropology and education. Psychoanalytic anthropology.

## Selected Publications

Paths to Success: Beating the Odds in American Society (Harvard University Press). Educational Policy in an Era of Conservative Reform (AMS Press). Race, Sex, and National Origin: Public Attitudes of Desegregation (AMS Press). Psychological Anthropology and Education (AMS Press). ALERTA: A Multicultural, Bilingual Approach to Teaching Young Children (Addison-Wesley).

## 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.

## Selected Publications

Thomas Hatch with Melissa Eiler White, Jason Raley, Kimberlee Austin, Sarah Capitelli, and Deborah Faigenbaum (2005). Into the classroom: Developing the scholarship of teaching and learning. San Francisco: JosseyBass. Thomas Hatch, Dilruba Ahmed, Ann Lieberman, Deborah Faigenbaum, Melissa Eiler White, and Desiree Pointer Mace (Eds.) (2005). Going public with our teaching: An Anthology of Practice. New York: Teachers College Press. Thomas Hatch, Melissa Eiler White \& Deborah Faigenbaum (2005). Expertise, Credibility, and Influence: How teachers can advance the field. Teachers College Record. 107 (5). Meredith Honig \& Thomas Hatch (2004). Crafting coherence: How schools strategically manage multiple, external demands. Educational Researcher, 33 (8), 16-30. Thomas Hatch (2002). When improvement programs collide. Phi Delta Kappan. 83 (8), 626634.

## Barbara Hawkins

Associate Professor of Language and Education Arts and Humanities

## Educational Background

B.A., Holy Names College;
M.A., Ph.D., University of

California, Los Angeles

## Scholarly Interests

Second language acquisition as it relates to subject matter education, K-6. Classroom interaction/ Classroom discourse. Second lan-
guage literacy development. Teacher Education: How teachers learn to connect theory and practice, especially as it relates to education for students learning content in their second language. Research question: What affects practice? Is language learning different than other kinds of learning? Can second language children achieve parity in content area education?

## Selected Publications

"Supporting second language children's content learning and language development in K-5" (Teaching English as a Second or Foreign Language, 3rd ed.).
"Reexamining instructional paradigms for $\mathrm{K}-12$ second language learners" (The CATESOL Journal). "Teaching children to read in a second language" (Teaching English as a Second or Foreign Language, 2nd ed.). "Second language acquisition: An experimential approach" (Advances in applied psycholinguistics, co-author). "Is an appropriate response always so appropriate?" (Input in second language acquisition).


Jeffrey Henig
Professor of Political Science and Education
Organization and Leadership

## 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.

## Selected Publications

Mayors in the Middle: Politics, Race and Mayoral Control of Urban Schools (Princeton, 2004). Rethinking School Choice: Limits of the Market Metaphor (Princeton, 1994). Shrinking the State: The Political Underpinnings of Privatization (Cambridge, 1995). The Color of School Reform: Race, Politics and the Challenge of Urban Education (Princeton, 1999). Building Civic Capacity: The Politics of Reforming Urban Schools (Kansas, 2001). Public Policy and Federalism (St. Martins, 1985).

## Jay Heubert

Professor of Law and Education Organization and Leadership

## 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 issues in education. Equal educational opportunity. Highstakes testing. Law and school reform. Interprofessional collaboration.

## Selected Publications

"Accelerating Mathematics Achievement Using Heterogeneous Grouping" (American Educational Research Journal) (coauthor). Understanding Dropouts: Statistics, Strategies, and High-Stakes Testing (National Academy Press) (coeditor). High Stakes: Testing for Tracking, Promotion, and Graduation (National Academy Press) (co-editor). Law and School Reform (Yale University Press) (editor). "Schools Without Rules? Charter Schools, Federal Disability Law, and the Paradoxes of Deregulation" (Harvard Civil Rights-Civil Liberties Law Review).

## 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 mental retardation 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.

## Selected Publications

"The role of motivation in the interpersonal decision making of people with mental retardation" (Personality and motivational differences in persons with mental retardation, co-author). "Decisionmaking and mental retardation" (International Review of Research in Mental Retardation). "A closer look at interpersonal decisionmaking in adults with and without mental retardation" (American Journal on Mental Retardation). "Decision-making by adults with mental retardation in simulated situations of abuse" (Mental Retardation). "Evaluation of a decision-making curriculum designed to empower women with mental retardation to resist abuse" (American Journal on Mental Retardation).

## Olga Hubard

Assistant Professor
of Art Education
Arts and Humanities

## Educational Background

B.A., Universidad Iberoamericana; M.F.A., School of Visual Art; M.A., Ed.D, Teachers College, Columbia University

## Scholarly Interests

The interation of young people with artworks; the relationship of aesthetic theory and teaching practice; the place of the visual arts in the curriculum.

## Selected Publications

Hubard, O. (2006). "We've already done that one": Adolescents' responses to repeated engagements with the same artwork". International Journal of Art and Design Education, 25 (2). Hubard, O. (2005). The
human dimensions of aesthetic experience: An adolescent conversation with the art of Isamu Noguchi. In Art Education Dissertation Monographs, Vol. 1. New York: Program in Art and Art Education, Teachers College Columbia University. Hubard, O. (under review). "Originals and Reproductions: The influence of presentation format in adolescent responses to art images". Studies in Art Education. (Submitted fall, 2004). Hubard, O. (under review). "Shortsighted Advocacy: A Critique of Instrumental Arguments for Aesthetic Education". Journal of Aesthetic Education. (Submitted fall, 2004). Hubard, O. (under review). "Embodied Response in Art Museum Education."
"The linear and the multidimensional: Two types of inquiry into works of art."

## Luis Huerta

Assistant Professor of Education
Organization and Leadership

## Educational Background

Ph.D., University of California, Berkeley

## Scholarly Interests

Education Policy, Decentralization in education, School choice, Privatization in education, School finance.

## Selected Publications

Next steps for results: The improved school finance and the CFE v. State of New York case. Journal of Education Finance, (in press). Straw into gold, revenues into results: Spinning out the implications of the improved school finance (with Grubb, W. N. \& Goe, L.). Journal of Education Finance, (in press). Cyber and home school charter schools: Adopting policy to new forms of public schooling. (with M.F. Gonzalez \& C. d'Entremont), Peabody Journal of Education, 81(1), 103-139. 2006. The unending search for equity: California policy, the improved school finance, and the Williams case. (with W. N. Grubb \& L. Goe), Teachers College Record, 106(11), 2081-2101. 2004. The Loss of Public Accounta-
bility? A Home Schooling Charter School In Rural California. In B. Fuller (Ed.), Inside Charter Schools: The Paradox of Radical Decentralization. Harvard University Press, 2000.


Stephanie Jones
Assistant Professor of Education Curriculum and Teaching

## Educational Background

M.A., Miami University;

Ed.D., University of Cincinnati

## Sharon Kagan

Virginia and Leonard Marx Professor of Early Childhood and Family Policy
Curriculum and Teaching
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.

## Selected Publications

Kagan, S. L. (in press). A conversation with Sharon Lynn Kagan. In M. R. Jalongo \& J. P. Isenberg (Eds.), Exploring your role: A practitioner's introduction to early childhood education. Columbus, OH: Merrill/ Prentice Hall. Kagan, S.L. (in press). Advancing child abuse and neglect protective factors: The Role of the early care and education infrastructure. Center for the Study of Social Policy. Kagan, S. L., \& Lowenstein, A.
(in press). Parenting education: Cultural accelerator or reflector? Paper presented at cultural indicators conference. Harvard University, Cambridge, M.A. Kagan, S. L., \& Lowenstein, A. (in press). School readiness and children's play: Contemporary oxymoron or compatible option? In E. F. Zigler, D. G. Singer, \& S. J. Bishop-Josef (Eds.), Children's play: The roots of reading . Washington, DC: ZERO TO THREE Press. Kagan, S. L., \& Scott-Little, C. (in press). Early learning standards: Changing the parlance and practice of early childhood education. Phi Delta Kappan.

Pearl Kane
The Klingenstein Family Chair for the Advancement of Independent School Education 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.

## Selected Publications

The Colors of Excellence (TC Press). Independent School, Independent Thinkers (JosseyBass). The First Year of Teaching: Real World Stories from America's Teachers (Walker). The Challenge in Trusteeship (Association of Governing Boards). "Leadership in the New Millennium" (Independent Schools).

## 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.

## Selected Publications

Exams in Mathematics: Russian Experiments. Mathematics Teacher, 2003, 96(5),336-342 Examining the Interactions between Mathematical Content and Pedagogical Form: Notes on the Structure of the Lesson. For the Learning of Mathematics. 2004, Vol. 24, \# 1, 40-47. Conducting Research and Solving Problems: The Russian Experience of Inservice Training. In T. Watanabe \& D. Thompson (Eds.) The Work of Mathematics Teacher Educators. Exchanging Ideas for Effective Practice. AMTE, 2004, 35-48.

## Bonnie Kellty

Assistant Professor of Education Curriculum and Teaching

## Educational Background

B.S., University at Albany, State University of New York; M.A., Ed.D., George Washington University

## Scholarly Interests

Family adaptations for child learning and development. Early intervention home visiting. Authentic assessment methods. Early childhood inclusive practices. Research to practice.

## Valerie Kinloch

Assistant Professor of
English Education
Arts and Humanities

## Educational Background

B.A., Johnson C. Smith

University; M.A., Ph.D., Detroit
Wayne State University

## Scholarly Interests

English Education; Literacy;
Teaching for Diversity and Social Justice; Middle School Learners; African American Literature and Biographical Writings.

## Selected Publications

"Discourse Research in Applied Linguistics." Word. December 1999. (With Barton \& Dickson)
"Review Article of Class Politics: The Movement for the Students' Right to Their Own Language by Stephen Parks." Journal of Advanced Composition, 21:3 (Summer 2001): 705-710. (With Jerrie C. Scott) "The Traveling City: The Hudson's Store, Urban Literacy, and Access in Detroit, MI." Developmental ducation and Urban Literacy Monograph. Fall 2002. "Neither Distant Privilege Nor Privileging Distance: Literacies and the Lessons of the Heidelberg Project." "Multiple Literacies for the 21st Century." (February 2004). "A Rhetoric of Black Bodies: Race, Beauty, and Representation." Anthology of Popular Culture. (August 2004).

## 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

Language and Literacy, specifically: Vocabulary development and reading comprehension; Memory processes in reading and writing; Models of reading and composing; Computer, multimedia, and "future literacies."

## Selected Publications

Rieth, H.J., Bryant, D. P., Kinzer, C. K. Colburn, L. K., Hur, S., Hartman, P., Choi, H. S. (In press). An analysis of the impact of anchored instruction on teaching and learning activities in two ninth grade language arts classes. Journal of Special Education Technology. Williams Glaser, C., Rieth, H. J., Kinzer, C. K., Colburn, L. K., \& Peter, J. (2000). A description of the impact of multimedia anchored instruction on classroom interactions. Journal of Special Education Technology, 14(2), 27-43. Leu, D. J., \& Kinzer, C. K. (2000). The convergence of literacy instruction with networked technologies for information, communication, and education.

Reading Research Quarterly, 35(1), 108-127. Lin, X., Hmelo, C., Kinzer, C. K., \& Secules, T. (1999). Designing Technology to Support Reflection. Educational
Technology Research and
Development, 47 (3), 43-62.
JoAnne Kleifgen
Associate 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, Urbana Champaign

## Scholarly Interests:

Discourse Analysis. Children's Second Language and Literacy Development. Computers and Communication In Schools, Communities and the Workplace.

## Selected Publications

"Assembling talk: Social alignments in the workplace" (Research on Language and Social Interaction). "Cerrando la brecha digital/Closing the digital divide" (Panamanian Ministry of Education)." "Assessing websites for young learners of English: A Hallidayan framework" (Journal of the Applied Linguistics Association of Korea). "Assembling knowledge" (Research on Language and Social Interaction). "Kreyol Ekri, Kreyol Li: Haitian children and computers" (Educational Horizons).

## L. Knefelkamp

Professor of Higher 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.

## Selected Publications

Integrating Jewish Issues into the Teaching of Psychology (with Beck and Goldberg, American Psychological Association). Workbook for the Practice-toTheory Model (American College Personnel Association). New Directions in Higher Education: Applying New Developmental Findings (Jossey-Bass). "Higher education and the consumer society", "Seasons of academic life: Honoring our collective autobiography", "The multicultural curriculum and communities of peace" (Liberal Education). "Education for a world lived in common with others" (Education and Democracy, College Board).

## Michelle Knight

Assistant 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 teaching practices with diverse populations.

## Selected Publications

"The Intersections of race, class, and gender in the teacher preparation of an African-American social justice educator" (Equity $\mathcal{B}$ Excellence in Education). (De)constructing (in) visible parent consent forms: Negotiating power, reflexivity, and the collective within qualitative research. (Qualitative Inquiry). "Ethics in qualitative research: Multicultural feminist activist research" (Theory into Practice). "(In) (Di) Visible Identities of Youth: College preparation programs from a Feminist Standpoint"
(SUNY Press). "Finding Our Way: Challenging Oppressive Educational and Societal Practices" (The Thought and Practice of Anti-Racist Teaching, Routledge).

Robert Kretschmer
Associate Professor of Education and Psychology 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.

## Selected Publications

Reading and Hearing Impaired Individuals (Alexander Graham Bell Association). "Metacognition, metalinguistics and intervention" (Applied Psycholinguistics). "The psychoeducational assessment of hearing impaired children" (Auditory Disorders in School Children). "Educational consideration of at-risk hearing impaired children" (Speech, Language and Hearing Services in the Schools). "Teachers-asresearchers: Supporting professional development" (Volta Review). "Multihandicapped, hearing impaired students as thinkers and "feelers" (Volta Review).

Deanna Kuhn
Professor of Psychology and Education
Human Development

## Educational Background

B.S., University of Illinois; Ph.D., University of California, Berkeley

## Scholarly Interests

Cognitive development across the life span and implications for educational theory and practice.

## Selected Publications

Kuhn, D. (2005). Education for thinking. Harvard University Press. Kuhn, D. (2003). Under-
standing and valuing knowing as developmental goals. Liberal Education, 89 (3), 16-21.
Capon, N., \& Kuhn, D. (2004). What's so good about problembased learning? Cognition and Instruction, 22, 61-79. Kuhn, D. (2001). How do people know? Psychological Science, 12, 1-8. Kuhn, D. (1999). A developmental model of critical thinking. Educational Researcher, 28, 1625.


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

## Selected Publications

Laverty, M. "Freire's banking analogy and the educational imaginary." Pioneers in Education: Essays in Honor of Paulo Freire, Michael Shaughnessy (ed.), (Happauge, New York: Nova Sciences, forthcoming). Laverty, M. "Kate Gordon Moore (1878-1963): a precursor to Philosophy for Children." Thinking: the Philosophy for Children Journal (forthcoming). Laverty, M.,"The interplay of Virtue and Romantic Ethics in Chang rae Lee's A Gesture Life." Analecta Husserliana LXXXV, 00-00 (2005) A.T. Tymieniecka (ed.): pp. 191-205. Laverty, M., with Darryl De Marzio and Jaime Grinberg. Common questions and disparate voices: a philosophical conversation on education (Boston, Massachusetts: Pearson Custom Publishing, 2006).

Young-Sun Lee
Assistant 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 \& Item Response Theory, Educational and Psychological Measurement, and Applied Statistics.

## Selected Publications

Lee, Y.-S. (in press). Nonparametric ICC Estimation: A Comparison of Kernel Smoothing, Isotonic Regression, and Smoothed Isotonic Regression Approaches. Applied Psychological Measurement. Wollack, J. A., Bolt, D. M., Cohen, A. S., \& Lee, Y.-S. (2002). Recovery of Item Parameters in the Nominal Response Model: A Comparison of Marginal Likelihood Estimation and Markov Chain Monte Carlo Estimation. Applied Psychological Measurement, 26(3). pp. 339-352.

## 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.

## Selected Publications

"Stories are Learning" (The Museum as a Place of Learning, Cornell University). Kinship and Casework: Family Networks and Social Intervention (Russell Sage Foundation). Families and Communities as Educators (Teachers College Press). "The school and parents" (The Teachers Handbook). "The concept of educative style" (Teachers College Record). "Family contexts of television" (Educational Communication and Technology).

## Stephen Lepore

Professor of Health Education Health and Behavior Studies

## Educational Background

B.A., Clark University;

Ed.M., Harvard University; Ph.D., University of California

## Scholarly Interests

Psycho-Oncology. Social disparities in health. Evidence-based behavioral medicine. Social relations, emotions, stress, and health. Educational and psychosocial interventions for promoting health.

## Selected Publications

Eton, D. T., Lepore, S. J., \& Helgeson, V. S. (2005). Psychological distress in spouses of men treated for early-stage prostate carcinoma. Cancer, 103, 2412. 2418. Roberts, K. J., Lepore, S. J., \& Helgeson, V. (2005). Socialcognitive correlates of adjustment to prostate cancer. PsychoOncology, 14, 1-10. Lepore, S. J., Fernandez-Berrocal, P., Ragan, J., \& Ramos, N. (2004). It's not that bad: Social challenges to emotional disclosure enhance adjustment to stress. Anxiety, Stress, and Coping: An International Journal, 17, 341-361. Lepore, S. J., Helgeson, V. S., Eton, D., \& Schulz, R. (2003). Improv-ing quality of life in men with prostate cancer: A randomized controlled trial of group education interventions. Health Psychology, 22, 443-452. Lepore, S. J., \& Smyth, J., (Eds.) (2002), The Writing Cure: How Expressive Writing Influences Health and Well-Being. Washington, DC:

American Psychological Association. Links: Chapter 1, Chapter 6, Book Review.

## Nancy Lesko

Maxine Greene Professor of Distinguished Contributions to Education
Professor of 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.

## Selected Publications

"Denaturalizing adolescence: The politics of contemporary representations" (Youth $\mathcal{E}$ Society). "Past, present, and future conceptions of adolescence" (Educational Theory). "The 'leaky needs' of school-aged mothers: An examination of US programs and policies" (Curriculum Inquiry). Act Your Age: A Cultural Construction of Adolescence (Routledge Press). Masculinities at School (Sage Press).

## Henry Levin

William Heard Kilpatrick Professor of Economics and Education and Director, National Center for the Study of Privatization in Education (NCSPE)
International and Transcultural Studies

## Educational Background

B.S., New York University; M.A., Ph.D. Rutgers University

## Scholarly Interests

Economics of education. Costeffectiveness analysis. School reform. Educational vouchers.

## Selected Publications

Cost Effective Analysis:
Concepts and Applications, 2nd Ed. (Sage Publications). Privatizing Education (Westview Press).
"Educational vouchers: Effective-
ness, choice, and costs" (Journal of Policy Analysis and Management). "Educational performance standards and the economy" (Educational Researcher). "Accelerated schools: A Decade of Evolution" (International Handbook of Educational Change).


## Erika Levy

Assistant Professor of Technology and Education Biobehavioral Studies

## 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, multilingualism.

## Selected Publications

Levy, E. S. (2001). Baby's First Steps (in French, Spanish, and Italian): Series of 3 books and CDs. NY: Living Language, Random House. Levy, E. S., Goral, M., \& Obler, L. K., (1999). Neurolinguistic perspectives on mother tongue: Evidence from aphasia and brain imaging. Les cahiers Charles V, 27. Paris: Publication de l'universit de Paris 7. Levy, E. S., Obler, L. K., Goral, M. (2005). Doghouse/chien maison/niche: Compounds in bilinguals. In G. Libben and Jarema, G. (Eds.), The Representation and Processing of Compound Words. Edmonton, Canada. Goral, M., Levy, E. S., \& Obler, L. K. (2002). Neurolinguistic aspects of bilingualism. International Journal of Bilingualism, 6, 351-380.

## Xiaodong Lin

Associate Professor of
Technology and Education
Mathematics, Science, and Technology

Educational Background
B.A., Teachers College, Columbia University 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.

## Selected Publications

Lin, X.D. \& Hatano, G. (In Press). Technology, culture and adaptive mind. Mind, Culture \& Activities. Lin, X.D. \& Schwartz, D. (In Press). Reflection at the crossroad of cultures. Mind, Culture \& Activities. Schwartz, D. X.D. Lin, X.D. (2001a). Reflective adaptation of a technology artifact: A case study of classroom change. Cognition \& Instruction, 19(4), 395-440. Lin, X.D. (2001b). Designing metacognitive activities. Educational Technology Research \& Development, 49(2), 23-40. Schwartz, D.L \& Lin, X. D. (In press). Technologies for learning from intercultural reflection. Intercultural Education. Schwartz, D. L. \& Lin (2001). Computers, productive agency, and the effort after shared meaning. Journal of Computing in Higher Education, 12(2), 3-33. Bransford, J. B., Lin, X.D. \& Schwartz, D. L. (2000). Technology, learning and schools: Comments on articles by Tom Carroll \& Gerald Bracey. Contemporary Issues in Technology and Teacher Education, 1 (1). Lin, X.D., Hmelo, C., Kinzer, C., \& Secules, T. (1999). Designing technology to support reflection. Educational Technology Research
\& Development., 47 (3), 43-62. Lin, X.D., \& Lehman, J. (1999). Supporting learning of variable control in a computer-based biology environment: effects of prompting college students to reflect on their own thinking. Journal of Research In Science Teaching, 36 (7), 837-858.

## Suniya Luthar

Professor of Psychology and Education and Department Chair Counseling and Clinical Psychology
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.

## Selected Publications

Luthar, S. S. (in press). Resilience in development: A synthesis of research across five decades. In D. Cicchetti \& D. J. Cohen (Eds.), Developmental Psychopathology: Risk, disorder, and adaptation (2nd edition). New York: Wiley. Luthar, S. S. (2003). The culture of affluence: Psychological costs of material wealth. Child Development, 74, 15811593. Luthar, S.S (Ed.) (2003). Resilience and vulnerability: Adaptation in the context of childhood adversities. Cambridge University Press. Knapp, P. (2005). Journal of the American Academy of Child and Adolescent Psychiatry, 44(4), 399-400. Daniel, B. (2004). Journal of Social Policy, 33(3), 519-521.

Anand Marri
Assistant 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 and Democratic Education, Multicultural Education, Race/ Ethnicity, Teacher Education, Critical Analysis of Technology in Education, and Social Studies Education.

## Selected Publications

Marri, A. (2005). Building a framework for classroom-based multicultural democratic education (CMDE): Learning from three skilled teachers. Teachers College Record, 104(5), 10361059. Marri, A. (2005). Educational technology as a tool for multicultural democratic education: The case of one US history teacher in an under-resourced high school. Contemporary Issues in Technology and Teacher Education, 4(4), 395-409. Available: http://www.citejournal.org/ Marri. A. (2003). Multicultural democracy: Toward a better democracy. Intercultural Education, 14 (3), 263-277. Marri, A. (2003). Social studies, race, and the World Wide Web. In G. Ladson-Billings (Ed.), Critical race theory perspectives on the social studies: The profession, policies, and curriculum (pp. 247-269). Greenwich, CT: Information Age Publishing. Hess, D. \& Marri, A. (2002). Which cases should we teach? Social Education, 66 (1), 53-59.

## 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.

## Selected Publications

Informal and Incidental Learning in the Workplace (Routledge).

Sculpting the Learning Organization (Jossey-Bass).Team Learning Survey (Organization Design and Development). Facilitating Learning Organizations: Making Learning Count (Gower). "Informal Learning on the Job" (Advances in Developing Human Resources, Berrett Koehler).


Robert McClintock Sue Ann and John L. Weinberg Professor for the Historical and Philosophical Foundations of Education
Mathematics, Science, and Technology

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 life span. Violence and mental health. Aging and gender issues. Families of people with disabilities. Predictions of psychotherapy utilization in white and ethnic minority populations.

## Selected Publications

"Helping by siblings of children with mental retardation" (American Journal of Mental Retardation). "Personality correlates of heroic rescue during the Holocaust (Journal of Personality). Altruism in Later Life (Sage Publications). "Anorexia Nervosa in post-menopausal women" (Journal of Mental Health and Aging). "Altruism and the Vietnam War veteran" (Journal of Traumatic Stress).

## Janet Miller

Professor of English Education Arts and Humanities

## Educational Background

A.B., Grove City College; M.A., University of Rochester; Ph.D., Ohio State University

## Scholarly Interests

Feminist curriculum theorizing. Constructions of teachers' identities in collaboration and school reform efforts. Issues of representation, especially in autogiographical and biographical forms.

## Selected Publications:

Creating Spaces and Finding Voices: Teachers Collaborating for Empowerment (SUNY Press). (Co-ed.) A Light in Dark Times: Maxine Greene and the Unfinished Conversation (Teachers College Press). "What's Left in the Field.... A Curriculum Memoir" (Journal of Curriculum Studies). "English education in the making" (English Education). Sounds of Silence Breaking: Women, Autobiography, Curriculum (2005. Peter Lang Publishing).

## 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.

## Selected Publications

"Religion and substance use and abuse among adolescents in the National Cormorbidity Survey" (Journal of the American Academy of Child and Adolescent Psychiatry). "Religion and depression; Ten year follow-up of depressed mothers and offspring" (Journal of the American Academy of Child $\mathcal{F}$ Adolescent Psychiatry).


Dennis Mithaug
Professor of Education Health and Behavior Studies

## Educational Background

B.A., Dartmouth College; M.A., M.Ed., Ph.D., University of Washington

## Scholarly Interests

Equal opportunity. Empirical, Moral and Policy Theories. Selfdetermination. Self-regulation. Social Policy. Special Education Leadership.

## Selected Publications

Self-Determined Learning Theory: Construction, Verification, and Evaluation (Earlbaum). Learning to Theorize: A FourStep Strategy (Sage). Inclusive Schooling: National and International Perspectives (Earlbaum). Equal Opportunity Theory (Sage). Self-Regulation Theory: How Optimal Adjustment Maximizes Gain (Praeger).

## Marie Miville

Associate Professor of
Psychology and Education
Director of Training
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.

## Selected Publications

Miville, M. L., Carlozzi, A., Gushue, G. V., Schara, S., \& Ueda, M. (in press). Counselor training for a diverse clientele: Linking empathy, universaldiverse orientation, and emotional intelligence. Journal of Mental Health Counseling. Constantine, M. G., Kindaichi, M. M., \& Miville, M. L. (in press). Factors influencing the educational and vocational transitions of Black and Latino/a high school students. Professional School Counseling. Miville, M. L., Constantine, M. G., Baysden, M. F., \& So-Lloyd, G. (2005). Chameleon changes: An exploration of racial identity themes of multiracial people. Journal of Counseling Psychology, 52, 507516. Constantine, M. G., Warren, A. K., \& Miville, M. L. (2005). White racial identity dyadic interactions in supervision: Implications for supervisees' multicultural counseling competence. Journal of Counseling Psychology, 490-496. Miville, M. L., Darlington, P., Whitlock, B., \& Mulligan, T. (2005). Integrating identities: The relationships of racial, gender, and ego identities among White college students. Journal of College Student Development, 46(2), 157-175.

## Jane Monroe

Associate Professor of
Statistics and Education
Human Development

## Educational Background

B.A., Midwestern University; M.S., University of Wisconsin, Madison; Ed.D., Teachers College, Columbia University

## Scholarly Interests

Probability. Statistical inference. Multivariate techniques. Psychological factors that relate to performance in statistics, cognitive abilities and attitudes.

## Selected Publications

Introductory Statistics
(Scott Foresman).

## Felicia Moore

Assistant Professor of Science Education Mathematics, Science, and Technology

## Educational Background

B.S., University of North Carolina at Chapel Hill; M.S., North Carolina Agricultural \& Technical State University; Ph.D., Florida State University

## Scholarly Interests

Diversity issues related to preservice teacher education and multicultural education. Curriculum materials development with focus on diversity of instructional methods and assessments. Integration of science, technology, mathematics, and literacy. Critical theory and feminist poststructuralist theory (power, knowledge, language, difference).

## Selected Publications

Moore, F. (2006). Multicultural preservice teachers' views of diversity and science teaching. Research and Practice in Social Sciences, 1(2), 98-131. Moore, F.M. (2005). Science and mathematics integration for intermediate grades, 3-4. Boston, MA: Houghton Mifflin. Moore, F.M. (2005). Science and reading integration for primary grades, K-2.
Boston, MA: Houghton Mifflin. Moore, F. M. (2005). Science and reading integration for intermediate grades, 5-6. Boston, MA: Houghton Mifflin. Moore, F. (2005). Vocabulario espanol para profesores de biologia, Editor.
Professional Resources Project. Moore, F.M. (2003). In the midst of it all: A feminist perspective on science and science teaching. In A.L.

## Gary Natriello

Professor of Sociology and Education 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.

## Selected Publications

Natriello, G. (2001). Bridging the Second Digital Divide: What can sociologists of education contribute? Sociology of Education, 74, 260-266. Natriello, G. \& A, Pallas (2001). The development and impact of high stakes testing. Pg. 19-38 in G. Orfield \& M.L. Kornhaber. (Eds.) Raising Standards of Raising Barrier: Inequality and High-Stakes Testing in Public Education. New York: The Century Foundation. McDill, E.L. \& G. Natriello (1998). The effectiveness of the Title I Compensatory Education Program: 1965-1997. Journal of Education for Students Placed At Risk, 3 , 317-335. Firestone, W., M. Goertz, and G. Natriello (1997). From Cashbox to Classroom: The Impact of the Quality Education Act in New Jersey. New York: Teachers College Press. Natriello, G. (1987). The impact of evaluation processes on students. Educational Psychologist, 22:155-175.


Rachel Navarro
Assistant Professor of
Psychology and Education
Counseling and
Clinical Psychology

## Educational Background

B.A., University of WisconsinEau Claire; M.S., University of Wisconsin-Madison; Ph.D., University of Missouri-Columbia

## Scholarly Interests

Multicultural Psychology and Education. Academic and Career Development of Adolescents and College Students from Culturally Diverse Backgrounds, in particular Latinas and Latinos. Influence of Cultural, Environmental and Personal Factors on Willingness to and Attitudes Toward Seeking Personal and Career Counseling. Impact of Multiple Social Identities (i.e., Gender, Race, Ethnicity, Social Class, and Sexual Orientation) on Personal, Social, Academic, and Career Functioning. Development and Validation of Assessment Instruments Measuring Psychological Constructs for Persons from Culturally Diverse Backgrounds. Multicultural Psychological Assessment.

## Selected Publications

Flores, L. Y., Navarro, R. L., Smith, J., \& Plojaz, A.(in press). Testing a model of career choice with Mexican American adolescent boys. Journal of Career Assessment. Worthington, R. L., \& Navarro, R. L. (2003). Pathways to the future: Analyzing the contents of a content analysis. The Counseling Psychologist, 31 (1), 85-92. Gloria, A. M., Hird, J. S., \& Navarro, R. L. (2001). Relationships of cultural congruity and perceptions of the university environment to help-seeking attitudes by sociorace and gender. Journal of College Student Development, 42, 545562. Greene, D. M., \& Navarro, R. L. (1998). Situation-specific assertiveness in the epidemiology of sexual victimization among university women: A prospective path analysis. Psychology of Women Quarterly, 22,589-604. Flores, L. Y., Navarro, R. L., \& Ojeda, L. (in press). Career counseling with Latinas in the U.S. In W. B. Walsh and M. J. Heppner (Eds.), Handbook of career counseling for women. Hillsdale, NJ: Lawrence Erlbaum Associates.


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.

## Selected Publications

Neumann, Anna. "Professing Passion: Emotion and Thought in Scholarship, Experiences of Recently Tenured Professors in Major American Research Universities". American Educational Research Journal, in press.
Neumann, Anna, and Aaron M. Pallas. "Windows of Possibility: Perspectives on the Construction of Educational Researchers." The Sage Handbook for Research in Education: Engaging Ideas and Enriching Inquiry, edited by Clifton Conrad and Ronald C. Serlin. Thousand Oaks: Sage, 2006, pp.429-449. Neumann, Anna. "To Glimpse Beauty and Awaken Meaning: Scholarly Learning as Aesthetic Experience," published as part of "Symposium: Aesthetic Lives: Teaching and Learning as Creative Work." Journal of Aesthetic Education, Vol. 39, No. 4, Summer 2005, pp. 68-88. Custodero, Lori A., Anna Neumann, David T. Hansen.
"Introduction to Aesthetic Lives: Teaching and Learning as Creative Work," published as part of "Symposium: Aesthetic Lives: Teaching and Learning as Creative Work." Journal of Aesthetic Education, Vol. 39, No. 4, Summer 2005, pp. 33-35. Neumann, Anna, Aimee LaPointe Terosky, and Julie Schell. "Strategies for Assuming Agency in the Construction of a Tenured Faculty Career." Enhancing Understanding of Faculty Roles and Work-lives, edited by Susan J. Bracken, Diane Dean, and Jeanie Allen. Women's Caucus of the American Association for Higher Education. Stylus Publishing, LLC, in press.

## 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.

## Selected Publications

"Group dynamics, organizational irrationality, and social complexity: Group Relations Reader 3." The A. K. Rice Institute. "Diversity and authority conferences as a social defense." In Gould, L.J., Stapley, L. \& Stein, M. (Eds.), Applied experiential learning: The group relations training approach. "The Multiplicity of Roles and Demands for the Leader as Partner." In Segil, L., Belasco, J., \& Goldsmith, M. (Eds.) The Leader as Partner. "The Role of Personality Assessment in Organization Development." In Waclawski, J. \& Church, A. (Eds.) Organization development: A process of learn-
ing and changing. "The Tiller of Authority in a Sea of Diversity: Empowerment, Disempowerment, and the Politics of Identity." In Klein, E., Gabelnick, F. \& Herr, P. (Eds.), Dynamic consultation in a changing workplace.

## Kathleen O'Connell

Isabel Maitland Stewart Chair 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.

## Selected Publications

O'Connell, K.A., Schwartz, J. E., Gerkovich, M.M., Bott, M. J., \& Shiffman, S. (2004). Playful and Rebellious States Versus Negative Affect in Explaining the Occurrence of Temptations and Lapses During Smoking Cessation. Nicotine and Tobacco Research 6, 661-174. O'Connell, K.A., Gerkovich, M. M., Bott, M. J., Cook, M. R., \& Shiffman, S. (2002). The effect of anticipatory strategies on the first day of smoking cessation. Psychology of Addictive Behaviors, 16, 150-156. O'Connell, K.A. (1991). Why rational people do irrational things: The theory of psychological reversals. Journal of Psychosocial Nursing, 29, 11-14. O'Connell, K.A., Hamera, E.K., Schorfheide, A., \& Guthrie, D. (1990). Symptom beliefs and actual blood glucose in Type II diabetes. Research in Nursing and Health, 13, 145-151. (Selected for an Editor's Citation by Behavioral Medicine Abstracts (1990) 11, 173). O'Connell, K.A., Cook, M.R., Gerkovich, M.M., Potocky, M., \& Swan, G.E., (1990). Reversal theory and smoking: A state-based approach to ex-smokers' highly tempting situations, Journal of Consulting and Clinical Psychology, 58, 489-94.

## Honor O'Malley

Associate Professor of Audiology Biobehavioral Studies

## 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.

## Selected Publications

"Influence of temporal masking on Click-Pair Discriminability" (Perception and Psychophysics). "Two-tone auditory spectral resolution" (Journal of the Acoustical Society of America). "Relationship between psychophysical tuning curves and suppression" (Journal of the Acoustical Society of America). "The relationship between loudness-intensity functions and the Click-ABR Wave V Latency Functions" (Ear and Hearing). "Cross-modality matching and the loudness growth function for Click Stimuli" (Journal of the American Academy of Audiology).


Celia 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 peda-
gogy. Inclusion of students with disabilities in general education classrooms.

## Selected Publications

Oyler, C. (1996). Making room for students: Sharing teacher authority in Room 104. New York: Teachers College Press. Oyler, C. \& The Inclusive Study Group (forthcoming). Student teachers inquiries into learning to teach inclusively. Hamre, B., \& Oyler, C. (2004). Preparing teachers, for inclusive classrooms: Learning from a collaborative inquiry group. Journal of Teacher Education, 55 (2), 154163. Oyler, C., Jennings, G., \& Lozada, P. (2001). Silenced gender: The construction of a male primary educator. Teaching and Teacher Education, 17, 367-379. Oyler, C. (2001, Spring). Democratic classrooms and accessible instruction. Democracy and Education, 14 (1)28-31.

## Aaron Pallas

Professor of Sociology and Education $\mathcal{E}$ Acting Vice President for Academic Affairs
Human Development

## Educational Background

B.A., University of Virginia; Ph.D., Johns Hopkins University

## Scholarly Interests

Educational stratification, sociology of the life course, research methodology, school effects and effectiveness, and social organization of schools.

## Selected Publications:

"The effects of schooling on individual lives." (Handbook of Sociology and Education).
"Preparing education doctoral students for epistemological diversity." (Educational Researcher). "Class size and eighth grade math achievement in the United States and abroad." (Educational Evaluation and Policy Analysis, co-author).
"The development and impact of high-stakes testing." (Raising standards or raising barriers? Inequality and high-stakes testing in public education, co-author). "Educational participation across
the life course: Do the rich get richer? (New Frontiers in Socialization: Advances in Life Course Research).


Dolores Perin
Associate Professor of Psychology and Education Health and Behavior Studies

## Educational Background

B.A., Ph.D., in Psychology, University of Sussex

## Scholarly Interests

Reading and writing disabilities in children and adults. Academic preparedness and remediation in community colleges. Adult education and workplace literacy.

## Selected Publications

"Can community colleges protect both access and standards? The problem of remediation." (Teachers College Record).
"Institutional decision-making for increasing academic preparedness in community colleges." (New Directions in Community Colleges). "Effects of text, domain and learner variables on the academic writing of developmental reading students" (Higher Education).
"Effects of repetition on informational writing of developmental reading students" (Journal of Developmental Education). "Academic-occupational integration as a reform strategy for the community college: Classroom perspectives" (Teachers College Record).

## 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.

## Selected Publications

"The multiple category problem: Category activation and inhibition in the hiring process" (in press, Academy of Management Review). "Age and ageism in organizations: A review and consideration of national culture" (In Handbook of Workplace Diversity, Eds.). "An exploration of access and treatment discrimination and job satisfaction among college graduates with and without physical disabilities" (Human Relations). "Moderating effects of personal and contextual factors in age discrimination" (Journal of Applied Psychology). "Individual differences in the effectiveness of sexual harassment awareness training" (Journal of Applied Social Psychology). "Explaining gender-based selection decisions: A synthesis of contextual and cognitive approaches" (Academy of Management Review).

## Stephen Peverly

Associate Professor of
Psychology and Education
Health and Behavior Studies

## Educational Background

B.A., Manhattan College; M.S., Ed.S., SUNY, Albany; Ph.D., Pennsylvania State University

## Scholarly Interests

The cognitive processes that underlie reading comprehension and studying, and Cross-cultural differences between U.S. and Chinese children in mathematical performance and the reasons for differences in performance. He teaches courses on memory, reading comprehension and studying,
law and ethics for school psychologists, and individual psychological testing.

## Selected Publications

Peverly, S. T., Ramaswamy,
V., Brown, C., Sumowski, J., Alidoost, M., \& Garner, J. (revise and resubmit). Skill in Lecture Note-taking: What Predicts? Journal of Educational Psychology. Zhou, Z., Peverly, S. T., \& Xin, T. (in press). Knowing and teaching fractions: A cross-cultural study of American and Chinese mathematics teachers. Contemporary Educational Psychology. Han, Z. H, \& Peverly, S. T. (in press). Input processing: A study of ab initio learners with multilingual backgrounds. International Journal of Multiculturalism. Peverly, S. T. (2006). The importance of handwriting speed in adult writing. Developmental Neuropsychology, 29, 197-216. Zhou, Z., Peverly, S. T., Lin, J-S., \& (2005).

Understanding early mathematical competencies in American and Chinese children. School Psychology International, 26, 413-427.

Lenore 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

## Selected Publications

"Critical thinking and music listening" (Music Educators Journal). "Metacognition: A dimension of musical thinking" (Dimensions of Musical Thinking).
"Attitudinal assessment of upper elementary students in a processoriented music curriculum" (Journal of Research in Music

Education). "Creative Arts
Laboratory" (Final Report-U.S.
Department of Education, Fund for Innovative Education). "Arts curricula in transition" (Journal of Aesthetic Education).

## James Purpura

Associate Professor of Linguistics and Education, Director of TESOL Program 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.

## Selected Publications

Assessing Grammar (Cambridge University Press, 2004). Strategy Use and Second Language Test Performance (Cambridge University Press). Validating Questionnaires to Examine Personal Factors in L2 Test Performance. In M. Milanovich \& C. Weir (Eds.), European Language Testing in a Global Context. Proceedings of the Association of Language Testers of Europe (ALTE) Conference of Barcelona. Cambridge: Cambridge University Press. "An analysis of the relationships between test takers' cognitive and metacognitive strategy use and second language test performance" (Language Learning). The development and construct validation of an instrument designed to investigate the cognitive background characteristics of test takers (Lawrence Erlbaum Associates).

Patricia Raskin
Associate Professor of
Psychology and Education
Organization and Leadership

## Educational Background

B.S., M.Ed., Pennsylvania State

University; Ph.D., New York University

## Scholarly Interests

Career development of adults
(especially women). Identity.
Work/family issues. Retirement.

## Selected Publications

Recently appointed as co-editor of Sloan Electronic Work-Family Encyclopedia. Raskin, P.M. (in press). Confident communication. In E.L. Rigolosi, Winning leadership. New York: Springer. Raskin, P. M. (2002b). Identity in adulthood: Reflections on recent theory and research. Identity, 2(1), 101-108. Raskin, P. M. (2002a). Career development of women. Work-Family Encyclopedia. Retrieved, from the World Wide Web: www.bc.edu/bc Coard, S., Breland, A., \& Raskin, P. (2002). Perceptions of and preferences for skin color, Black racial identity, and self-esteem among African Americans. Journal of Applied Social Psychology.

## Michael Rebell

Executive Director, Campaign for Educational Equity and Professor of Law and Educational Practice School Law Institute

## 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.

## Selected Publications

Equality and Education (with Arthur R. Block), Princeton University Press, 1985. Educational Policy Making and the Courts: An Empirical Study of judicial Activism (with Arthur R. Block), University of Chicago Press, 1982. Articles: Adequacy Litigations: A New Path to Equity in Janice Petrovich and Amy Stuart Wells, eds., Bringing Equity Back: Research for a new era in American Educational Policy (Teachers College Press, 2005). Highly Qualified Teachers: Pretense or Legal Requirement? 85 Phi Delta Kapan 690 (May, 2004) (with Molly Hunter). Education Adequacy, Democracy and the Courts in Christopher

Edley, Timothy Ready and Catherine Snow, eds., achieving high educational standards for all (National Academy Press, 2002).


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.

## Selected Publications

"Becoming an infant caregiver: Three profiles of personal and professional growth" (Journal of Research in Childhood Education). "Caregiver perceptions and childcaregiver interactions in a newlyinclusive infant child care center" (Early Childhood Education Journal). "Social communication and response to ambiguous stimuli in toddlers with visual impairments" (Journal of Applied Developmental Psychology). "Establishing intersubjective experience: Developmental challenges for young children with congenital blindness and autism and their caregivers" (Blindness and Psychological Development in Young Children). "Play and concept development in infants with severe visual impairments: A constructivist view" (Journal of Visual Impairment and Blindness).

Craig Richards
Professor of Education 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

School finance, equity, adequacy, and efficiency, especially the dynamics of state policy in promoting or undermining them. Institutional incentives. The strengths and weaknesses of market approaches to education. Performance accountability systems. Ecological and dynamic systems modeling of educational processes and outcomes.

## Selected Publications

Financing Educational Systems: Policy and Practice (Co-Author) (Merrill/Prentice-Hall) (2006). The Ecology of Educational Systems: Models, Tools and Cases for Improvisational Leadership (Co-Author) (Merrill/Prentice-Hall) (December 2004). Risky Business: Private Management of Public Schools (Co-Author) (Economic Policy Institute) (1996). Rethinking Effective Schools (Co-Editor) (Prentice Hall) (1990). Microcomputer Applications for Strategic Management In Education: A Case Study Approach (Longman, Inc.) (1989).

Elaine Rigolosi
Professor of Education
Organization and Leadership

## Educational Background

B.S., Columbia Union College; M.N., University of Florida; Ed.D., University of Massachusetts; J.D., Benjamin N. Cardozo School of Law, Yeshiva University

## Scholarly Interests

Health care administration. Health care law. Nursing administration and education. Consumer satisfaction with health care. Humanistic applications in health care delivery.

## Selected Publications

The Empathy Construct Rating Scale (E Pluribus Maximus). The La Monica Empathy Profile (E Pluribus Maximus). Management in Health Care: A Theoretical and Experiential Approach (Macmillan). Management in Nursing: An Experiential Approach that Makes Theory Work for You (Springer). Management and Leadership in Health Care: An Experiential Approach, 2nd Edition (Springer 2005).

Francisco Rivera-Batiz
Professor of Economics
and Education
International and
Transcultural Studies

## 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.

## Selected Publications

"Education and Economic Development in Puerto Rico," in Barry Bosworth and Susan Collins, editors, The Puerto Rican Economy: Prospects for Growth, Brookings Institution, Washington, D.C., forthcoming, 2005 (book chapter, with Helen F. Ladd). Democracy, Participation and Development, Special Issue of Review of Development Economics, Vol. 6, No. 2, June 2002 (guest editor, with Luis A. Rivera-Batiz). The Political Economy of the East Asian Crisis: Tigers in Distress, Edward Elgar Publishers, Cheltenham, U.K. (edited book volume, with Arvid Lukauskas), 2001. International Financial Liberalization, Capital Flows and Exchange Rate Regimes, Special Issue of Review of International Economics, Volume 9, No. 4, November 2001 (guest editor, with Luis A. Rivera-Batiz). "Global Trends in the Financing of Higher Educa-
tion: Prospects and Challenges for the Next Decade," paper prepared for the Task Force on Higher Education and Society, The World Bank/United Nations/Harvard Institute for International Development, 1999 (research report, with David E. Bloom, Harvard University).

## Ann Rivet

Assistant Professor of
Science and Education Mathematics, Science, and Technology

## Educational Background

Sc.B., Brown University; M.S., Ph.D., University of Michigan

## Selected Publications

Rivet, A. \& Krajcik, J. (2004). Achieving standards in urban systemic reform: An example of a sixth grade project-based science curriculum. Journal of Research in Science Teaching, 41(7), 669692. Rivet, A. \& Krajcik, J. (2004). Contextualizing instruction in project-based science: Activating students' prior knowledge and experiences to support learning. In Y. B. Kafai, W. A. Sandoval, N. Enyedy, A. S. Nixon \& F. Herrera (Eds.), Embracing Diversity in the Learning Sciences; The Proceedings of the Sixth International Conference of the Learning Sciences (ICLS 2004). Santa Monica, CA: Lawrence Erlbaum Associates. Rivet, A. \& Schneider, R. (2004). Exploring the role of digital photography to enhance student inquiry in a local ecosystem. Journal of Computers in Math and Science Teaching, 23(1), 47-65. Rivet, A. \& Krajcik, J. (2002). Contextualizing instruction: Leveraging students' prior knowledge and experiences to foster understanding of middle school science. In P. Bell, R. Stevens, \& T. Satwicz (Eds.), Keeping Learning Complex: The Proceedings of the Fifth International Conference for the Learning Sciences (ICLS). Mahwah, NJ: Earlbaum. Rivet, A., Krajcik, J., \& Reiser, B. (2003). Design principles for developing inquiry materials with
embedded technologies. Paper presented at the annual meeting of the American Educational Research Association (AERA). April 2003: Chicago, IL.

## Janice Robinson

Assistant Professor of Higher Education and Special Counsel to the President, Office of the President - Diversity and Community, Office of
Diversity $\mathcal{E}$ Community

## 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 education and legal education. Legal issues in education. Access and diversity in higher education. University and professional school leadership.

## Selected Publications

"Collective Self Esteem and Perceived Social Support as Predictors of Cultural Congruity among Black and Latino College Students" (The Journal of College Student Development, co-authored Constantine, M.G., Wilton L., and Caldwell, L.D.) The Journal of College Student Development Vol. 43 No. 3 May/June 2002. "Unlocking the Doors to Legal Education: Rutgers-Newark's Law School's Minority Student Program" (NJ Lawyer - The Magazine). "Harbinger of Hope" (The Rutgers Tradition).

## Denise Ross

Associate Professor of Psychology and Education Health and Behavior Studies

## Educational Background

B.A., Spelman College;
M.A., Ph.D., Teachers College,

Columbia University

## Scholarly Interests

Autism, Verbal
Behavior/Communication, Reading Disabilities.

## Selected Publications

Ross, D. E. (2002). Replacing faulty conversational exchanges for children with autism by establishing a functionally equivalent alternative response. Education and Training in Mental Retardation and Developmental Disabilities, 37, 343-362. Knight, M. G., Ross, D. E., Taylor, R., \& Ramasamy, R. (2003). Constant time delay and interspersal of known items to teach sight words for children with mental retardation and learning disabilities. Education and Training in Mental Retardation and Developmental Disabilities, 38, Ross, D. E., \& Greer, R. D. (2003). Generalized imitation and the mand: inducing first instances of speech in young children with autism. Research in Developmental Disabilities, 24, 58-74.


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.

## Selected Publications

Saigh, P. A., (2004). The Children's Posttraumatic Stress

Disorder Inventory. San Antonio, TX: Psychological Corp. Saigh, P. A., \& Bremner, J. D. (Eds.) (1999). Posttraumatic stress disorder: A comprehensive textbook. Needham Heights, MA: Allyn \& Bacon. Saigh, P. A., Yasik, A. E., Oberfield, R. O., Green, B., Halamandaris, P., Rubenstein, H., \& McHugh, M. (2000). The Children's PTSD Inventory: Development and reliability. Journal of Traumatic Stress, 13, 369-380. Saigh, P. A., Yasik, A. E., Oberfield, R. O., Halamandaris, P. (2002). A comparative analysis of the internalizing and externalizing behaviors of traumatized urban youth with and without PTSD. Journal of Abnormal Psychology, 111, 462. 470.

## John Saxman

Professor of Speech Pathology and Chair of the Department of Biobehavioral Studies Biobehavioral Studies

## Educational Background

B.A., San Diego State University; M.S., Ph.D., Purdue University

## Scholarly Interests

Communication disorders.
Phonatory behaviors across the life-span. Experimental Phonetics.

## Selected Publications

Introduction to Communication Disorders (Prentice-Hall).
"Acoustic observations in young children's non-cry vocalization" (Journal of the Acoustical Society of America). "A comparison of selected phonatory behaviors of healthy aged and young adults" (Journal of Speech and Hearing Research).

Frances Schoonmaker
Professor of Education Curriculum and Teaching

## Educational Background

B.A., University of Washington; M.A., George Peabody College for Teachers, Vanderbilt University; Ed.D., Teachers College, Columbia University

## Scholarly Interests

Curriculum, teaching, and supervision: history, theory and practice. Teacher preparation. Caring and values education. Religious education.

## Selected Publications

Growing Up Teaching: From Personal Knowledge to Professional Practice (Teachers College Press). "Promise and possibility: Learning to teach" (Teachers College Record). Curriculum making, models, practices and issues: A knowledge fetish? 100th Yearbook of the National Society for the Study of Education (University of Chicago Press). "The place of theory in a practical profession" (Contributions to Jewish Education). "Does theory leads practice? Teacher constructs on teaching: top-down perspectives" (Advances in Early Education and Day Care, co-author).

Ana Serrano
Assistant Professor of Social Studies and Education
Arts and Humanities

## Scholarly Interests

Studying the teaching-learning collaboration with particular emphasis on how thinking develops and changes during involvement in inquiry based collective activity. Student understanding of social studies concepts and content.

## Selected Publications

Stigler, J., Gonzales, P., Kawanaka, T., Knoll, S., \& Serrano, A. (1999). The TIMSS Videotape Classroom Study: Methods and Findings from an Exploratory Research Project on Eighth-Grade Mathematics Instruction in Germany, Japan, and the United States. (NCES). Serrano, A. M. (2001). Lessons Learned: A Cross-Cultural Study of Teaching. Kindergarten Education: Theory, Research, and Practice, Vol. 6, No. 1, Spring/Summer, pp. 23-34.

Mikki Shaw
Assistant Professor of
English Education
Arts and Humanities

## Educational Background

B.A., M.S., State University College; Ed.D., Teachers College, Columbia University

Sherri Sheinfeld Gorin
Research Associate Professor of Health Education
Health and Behavior Studies

## Keith Sheppard

Assistant Professor of
Science Education
Mathematics, Science
and Technology

## Educational Background

B.Sc., Liverpool University; P.G.C.E., Christ's College, Liverpool University; Ed.D., Teachers College, Columbia University

## Scholarly Interests

Student scientific understanding and conceptual change learning. The role of computers and technology in science teacher education. History of Science Education.

## Selected Publications

Sheppard, K. \& Robbins, D. M. (2002) Lessons From The Committee of Ten. The Physics Teacher. 40 (7)426-431. Sheppard, K. \& Robbins, D. M. (2002) Physics First. Principal Leadership. 3 (1) 67-70.
Sheppard, K. \& Robbins, D. M. (2003) Physics was Once First and Was Once for All. The Physics Teacher. 41 (6) 420-4. Sheppard, K. \& Robbins D.M. (2004) Chemistry: the Central Science? The History of the High School Science Sequence. Journal of Chemical Education (In Press). Sheppard, K.SPAN Drilling for Fluids. Scientific American Teacher's Kit. May 2001.

Marjorie Siegel
Associate Professor of Education Curriculum and Teaching

## Educational Background

B.S., University of Wisconsin, Madison; M.S., Ed.D., Indiana University

## Scholarly Interests

Reading in mathematics classrooms. Cultural and critical perspectives on literacy education. Literacy and the arts. Literacy and Technology.

## Selected Publications

Reading Counts: Expanding the Role of Reading in Mathematics Classrooms (Teachers College Press). "Critical approaches" (Handbook of Research on Reading, Vol 3). "Supporting students' mathematical inquiries through reading" (Journal for Research in Mathematics Education). "More than words: The generative power of transmediation for learning" (Canadian Journal of Education).


Stephen Silverman
Professor of Education
Biobehavioral Studies

## 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.

## Selected Publications

"Research on teaching in doctoral programs: A detailed investigation of focus, method, and analysis"
(Journal of Teaching in Physical Education). "Task structures, student practice, and student skill level in physical education" (Journal of Education Research). "The unit of analysis in field
research: Issues and approaches to design and data analysis" (Journal of Teaching in Physical Education). "Teacher feedback and achievement in physical education: Interaction with student practice" (Teaching and Teacher Education). Proposals that work: A guide for planning dissertations and grant proposals, 4th ed. (Sage).

## 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

Educational transfer and globalization from an international comparative perspective. Civic literacy and political socialization. Forced and voluntary migration, multiculturalism and educational policy studies. Colonial and postcolonial studies in education.

## Selected Publications

Steiner-Khamsi, Gita, ed. (2004). The Global Politics of Educational Borrowing and Lending. New York: Teachers College Press, 235 pages. Steiner-Khamsi, Gita, Torney Purta, Judith, \& Schwille, John, eds (2002). New Paradigms and Recurring Paradoxes in Education for Citizenship: An International Comparison. Oxford: Elsevier Science, 295 pages. Steiner-Khamsi, Gita \& Stolpe, Ines (2004). De- and Recentralization Reform in Mongolia: Tracing the Swing of the Pendulum. Comparative Education, 40/1, 29-53. SteinerKhamsi, Gita \& Quist, Hubert (2000). The Politics of Educational Borrowing: Reopening the Case of Achimota in British Ghana. Comparative Education Review, 44/3, 272-299.

Derald 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.

## Selected Publications

Understanding Abnormal Behavior (Houghton Mifflin). Counseling the Culturally Diverse: Theory and Practice (Wiley). Overcoming Our Racism: The Journey to Liberation (Jossey Bass). "The diversification of psychology: A multicultural revolution" (American Psychologist). "Multidimensional Facets of Cultural Competence" (The Counseling Psychologist).

Graeme Sullivan
Associate Professor of
Art Education
Arts and Humanities

## Educational Background

Dip. Art Ed. (Hons); M.A., Ph.D., Ohio State University

## Scholarly Interests

Cognition and artistic practice and research methods for arts disciplines.

## Selected Publications

Sullivan, G. (2005). Art Practice as Research: Inquiry in Visual Arts. Thousand Oaks, CA: Sage Sullivan, G. (1994). Seeing Australia: Views of Artists and Artwriters. Annandale: Piper Press. (Second reprint 1996) Sullivan, G. (2004). Studio art as research practice. In E. W. Eisner \& M. D. Day (Eds.), Handbook of research and policy in art education (pp. 795-814). Mahwah, NJ : Lawrence Erlbaum Associates Sullivan, G. (2002). Ideas and teaching: Making meaning from contemporary art. In Y. Gaudelius and P. Speirs (pp.2338). Contemporary issues in art education for elementary educators. Prentice-Hall Sullivan, G. (in press). Artful Practice: A

Reflexive Analysis. In J. A. Schaler (Ed.) Howard Gardner Under Fire: A Rebel Psychologist Faces His Critics. Chicago, IL: Open Court Publishing Company.

## Robert Taylor

Associate Professor of
Computing and Education Mathematics, Science, and Technology

## Educational Background

B.A., Denison University; B.D.,
M.A., University of Chicago; Ed.D., Teachers College, Columbia University

## Scholarly Interests

Computer-based technology in education, across the curriculum, and around the world, including its utility for human survival in a balanced ecosystem.

## Selected Publications

The Computer in the School: Tutor, Tool, Tutee (Teachers College Press). "Communicative technology and the emerging global curriculum" (ACM Siccue Outlook). "The use of the computer in teaching mathematics" (Journal of Technology and Teacher Education). "Educational problems and solutions incorporating technology" (Memorias: Il Congresso Colombiano de Informatica Educativa).

## Maria Torres-Guzman

Associate Professor of
Bilingual Education
International and
Transcultural Studies

## Educational Background

B.A., Universidad de Puerto

Rico; M.A., University of
Michigan; M.A., Ph.D.,
Stanford University

## Scholarly Interests

Cross-cultural communication and classroom interaction. Diversity and teacher education. Bicultural/bilingual curriculum. Parental involvement in bilingual/bicultural education. Spanish language arts.

## Selected Publications

Torres-Guzman, M. E., Morales, S, Han, A., \& Kleyn, T. (2005).

Self-designated Dual Language Programs: Is there a Gap Between Labeling and Implementation? Bilingual Research Journal.Torres-Guzman, M. E. (2005). La Lecture Suivre n'estelle qui Lecture Suivre? (Are Read Alouds Just Read Alouds?) Lettre de l'AIRDIF (International Research Association in French Didactics) No. 25. Torres-Guzman, M. E. \& Etxeberria, F. (2005). Modelo B/Dual Language Programs in the Basque Country and the U.S. International Journal in Bilingualism and Bilingual Education Hollins, E. \& Torres-Guzman, M. E. (2005). The Preparation of Candidates for Teaching Diverse Student Populations. In CochraSmith, M. \& Zeichner, K. (Eds.). Synthesis of Research on Teacher Education. Lawrence Erlbaum Association. Torres-Guzman, M. E. (2003). Preparing Teachers to Recognize and Confront Symbolic Violence in Bilingual Education. In Wallace, B. C. \& Carter, R. T. (Eds.). Understanding and Dealing with Violence: A Multicutural Approach. (Pp. 201-225) Thousand Oaks, CA: SAGE Publications.

## Mun Tsang

Professor of Education and Director for the Center on Chinese Education
Cheung Kong Professor of Economics of Education Chinese Ministry of Education International and Transcultural Studies

## 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.

## Selected Publications

"Intergovernmental grants for financial compulsory education in China" (Harvard China Review). "Education and national development in China since 1949: Oscillating policies and enduring dilemmas" (China

Review)." Financial reform of basic education in China (Economics of Education Review). "Cost analysis of educational inclusion of marginalized population" (UNESCO). "School Choice in the People's Republic of China" (book chapter, Teachers College Press). Economic analysis of education policy (Education Science Press).

## Barbara Tversky

Professor of Psychology
and Education
Human Development

## Herve Varenne

Professor of Education and Chair of the Department of International and Transcultural Studies
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.

## Selected Publications

Americans Together: Structured Diversity in A Midwestern Town. (Teachers College Press, 1977). American School Language: The Rhetorical Structuring of Daily Life in a Suburban High School. (Irvington Publishers, 1983). Symbolizing America. (Editor. University of Nebraska Press, 1986). Ambiguous Harmony: Family Talk in America (Ablex, 1992). Successful failure: The School America builds, with Ray McDermott (Westview, 1998).

## Lalitha Vasudevan

Assistant 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.

## Selected Publications

Looking for Angels: Knowing youth by engaging with their multimodal literacies (in press). Beyond the printed page: Multimedia storytelling with urban students (under review) with Katherine Schultz and Jennifer Bateman. Making Known Differently: Engaging Visual Modalities as Spaces to Author New Selves (under review). Media, Learning, and Sites of Possibility (forthcoming Spring 2007) co-edited with Marc L. Hill. Peter Lang.

## Frances Vavrus

Associate Professor of Education
International and
Transcultural Studies

## Educational Background

B.A., Purdue University; M.A., University of Illinois, UrbanaChampaign; Ph.D., University of Wisconsin, Madison

## Scholarly Interests

Development theory and history. Gender issues in education. Education and demographic change. Educational reform in Africa.

## Selected Publications:

Vavrus, F. (2003). Desire and Decline: Schooling Amid Crisis in Tanzania. Peter Lang Publishing. Vavrus, F., \& Richey, L. A. (2003, Fall/Winter). Women and Development: Rethinking Policy and Reconceptualizing Practice. Guest editors for special issue of Women's Studies Quarterly XXXI (3 \& 4). Vavrus. F. (2003). "The acquired income deficiency syndrome": School fees and sexual risk in northern Tanzania. Compare 33(2), 235-250. Vavrus, F. (2003). Uncoupling the articulation between girls' education and tradition in Tanzania. Gender
and Education 14(4), 367-389. Vavrus, F. \& Larsen, U. (2003). Girls' education and fertility transitions: An analysis of recent trends in Tanzania and Uganda. Economic Development and Cultural Change 51(4): 945-976.

Helen Verdeli
Assistant Professor of
Psychology and Education
Counseling and
Clinical Psychology
Ruth Vinz Enid
Professor in Teacher Education
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.

Selected Publications: Composing A Teaching Life (Heinemann, Boynton/Cook) On Writing Qualitative Research: Living by Words (Falmer). "Horrorscapes: (In) Forming adolescent identity and desire" (Journal of Curriculum Theorizing). "Opening moves: Conversations on the first year of teaching" (English Education).
"The things we carry: Working 'In Relation' to the past" (English Education).

## Bruce Vogeli

Clifford Brewster Upton Professor of Mathematics Education Mathematics, Science, and Technology

## Educational Background

B.S., Mount Union College; M.A., Kent Sate University; Ph.D., University of Michigan

## Scholarly Interests

International and comparative mathematics education. Education of the mathematically gifted. Curriculum development and evaluation. Fullbright Senior Specialist (2002-2007).

## Selected Publications

SBG Mathematics 2001 (six-book series, Silver Burdett and Ginn.) Special Schools for the Mathematically Talented - an International Panoramaa, fundacion andes (Lampadia Foundation). Houghton Mifflin Mathematics 2002 (seven-book series; senior author). Houghton Mifflin Math 2005 (in press).

## Cally Waite

Assistant 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.

## Selected Publications

Permission to Remain Among Us: Education for Blacks in Oberlin, 1880-1914 (Greenwood Press). "The Invisible 'Talented Tenth', Women and Dubois" (Feminist Engagements).
"Fighting Injustice Through Education" (History of Education).

Erica Walker
Assistant Professor of Mathematics and 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.

## Selected Publications

"Student Voices: African Americans and Mathematics" (NCTM Yearbook). Who can do mathematics? In Identifying and nurturing mathematically talented
students (Houghton Mifflin). Getting to the Right Algebra: The Equity 2000 Initiative in Milwaukee Public Schools (Manpower Demonstration Research Corporation, co-author). "Student Voices: African Americans and Mathematics" (National Council of Teachers of Mathematics Yearbook: Gender and Multicultural Equity in the Mathematics Classroom, co-author).


Barbara Wallace
Associate 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 schooland 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.

## Selected Publications

Crack Cocaine: A Practical
Treatment Approach for the Chemically Dependent (1991, Brunner/Mazel, Inc.), The Chemically Dependent: Phases of Treatment and Recovery (Editor, 1992, Brunner/Mazel, Inc.), Adult Children of Dysfunctional Families: Prevention, Intervention and Treatment for Community Mental Health Promotion (1996, Praeger

Publishers), Understanding and Dealing with Violence: A Multicultural Approach (with Co-Editor Robert T. Carter, Ph.D., 2003, Sage Publications), HIV/AIDS Peer Education Training Manual: Combining African Healing Wisdom and Evidence-Based Behavior Change Strategies (2005, StarSpirit Press), and Making Mandated Addiction Treatment Work (2005, Jason Aronson/ Rowman \& Littlefield).

Ye Wang
Assistant Professor of Education Health and Behavior Studies

Amy Wells
Professor of Sociology
and Education
Human Development
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.

## Selected Publications

Where Charter School Policy Fails: Issues of Accountability and Equity (Teachers College Press, editor). Stepping Over the Color Line: African-American Students in White Suburban Schools (Yale University Press, co-author). "Defining Democracy in the Neoliberal Age: Charter School Reform and Educational Consumption" (American Educational Research Journal co-author). "Reactions to the Supreme Court Ruling on Vouchers: Introduction to an Online Special Issue" (Teachers College Record http://www.tcrecord.org). "The politics of accountability: California School Districts and charter school reform" (The Stanford Law and Policy Review).

## 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. Applied behavioral prediction currently in the areas of leadership emergence, peace building, and help seeking. Organizational effectiveness theories, the nonprofit sector, and human resource management. Survey research and consulting.

## Selected Publications

Westaby, J.D., Versenyi, A., \& Hausmann, R.C. (2005). Intentions to Work During Terminal Illness: An Exploratory Study of Antecedent Conditions. Journal of Applied Psychology,
90, 1027-1035. Westaby, J.D. (2005). Behavioral Reasoning Theory: Identifying New Linkages Underlying Intentions and Behavior. Organizational Behavior and Human Decision Processes, 98-97-120. Westaby, J.D. (2005). Comparing Attribute Importance and Motivational Reason Methods for Understanding Behavior: An Application to Internet Job Searching. Applied Psychology: An International Review, 54, 568-583. Westaby, J.D., \& Lowe, J.K. (2005). Risk Taking Orientation and Injury among Youth Workers: Examining the Social Influence of Supervisors, Coworkers, and Parents. Journal of Applied Psychology. 90, 1297-1305. Lee, B., Westaby, J.D., \& Berg, D. (2004). Impact of a National Rural Youth Health and Safety Initiative: Results from a Randomized Controlled Trial. American Journal of Public
Health, 94, 1743-1749.
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.

## Selected Publications

"Improving the comprehension of disabled readers" (Annals of Dyslexia). "Teaching decoding with an emphasis on phoneme analysis and phoneme blending" (Journal of Educational Psychology). "Learning-disabled adolescents' difficulties in solving personal/social problems" (Teaching Decision-Making to Adolescents).
"Comprehension of students with and without learning disabilities: Identification of narrative themes and idiosyncratic text representations" (Journal of Educational Psychology).

## Leslie Williams

Professor of Education
Curriculum and Teaching

## Educational Background

B.A., Wellesley College;
M.A.T., Harvard University; Ed.D., Teachers College, Columbia University

## Scholarly Interests

Early childhood education. Multicultural education. Curriculum/program development and implementation. History of early childhood education.

## Selected Publications

Multicultural Education: A Source Book (Routledge/Falmer, co-author). Kaleidoscope: A Multicultural Approach for the Primary School Classroom (Prentice-Hall, co-author). Encyclopedia of Early Childhood Education (Garland, co-author). ALERTA: A Multicultural, Bilingual Approach to Teaching Young Children (Addison-Wesley, co-author). "Does practice lead theory? Teachers' constructs about teaching: Bottom-up perspectives" (Advances in Early Education and Day Care, Jai Press).

## Randi Wolf

Ella McCollum Vahlteich Professor of Nutrition and Education Health and Behavior Studies

## Educational Background

B.S., Cornell University; M.P.H., Ph.D., University of Pittsburgh

## Scholarly Interests

Factors influencing colorectal cancer screening behaviors. Nutrition and osteoporosis.

## Selected Publications

"Knowledge beliefs and barriers relevant to colorectal cancer screening in an urban population: A pilot study" (Family Community Health, co-author). "Factors associated with calcium absorption efficiency in pre- and perimenopausal women" (American Journal of Clinical Nutrition). "Update on the epidemiology of Osteoporosis" (Current Rheumatology Report). Epidemiology: The Magnitude of Concern In Preventing and Managing Osteoporosis (Springer Publishing). "Diet, bone loss, and fracture: A review of recent literature" (Current Opinion in Orthopedics).

## 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.

## Selected Publications

Yorks, L. (2005). Strategic human resource development in organizations. Mason, Ohio: South-Western College Publishing. Yorks, L.(2005). Adult learning and the generation of new knowledge and meaning: Creating liberating spaces for fostering adult learning
through practitioner based collaborative action inquiry. Teachers College Record, 107, 1217-1244. Vornonov, M. \& Yorks, L. (2005). Taking power seriously in strategic organizational learning. The Learning Organization, 12, 9-25. Yorks, L. (2004). Toward a political economy model for comparative analysis of the role of strategic human resource development leadership. Human Resource Development
Review, 3, 189-208. (Outstanding Article Award, HRDR, Academy of Human Research Development). Yorks, L. (2003). Beyond the classroom: Transfer from workbased learning initiatives. In E. Holton \& T. Baldwin, (Eds.). Improving learning transfer in organizations, (pp. 138-160). San Francisco: Jossey-Bass.

## 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.

## Selected Publications

"Research on teaching: Policy implications for teacher education" (NSSE Yearbook). Improving Teaching (ASCD Yearbook). "Curriculum Implementation" (AERA Handbook of Research on Curriculum). "Beginning professional teachers: The need for a curricular vision of teaching" (AACTE Knowledge Base for Beginning Teachers). "Teachers' characteristics: Research on the demographic profile" and "Research on indicators of quality" (AERA Studying Teacher Education).

## SPECIAL TERM FACULTY

## Arts and Humanities

Philip E. Aarons
Adjunct Assistant Professor of Arts Administration
B.A., Columbia University,

1973; J.D., 1976
Dino Anagnost
Adjunct Professor of
Music Education
B.A., Boston University, 1966;
M.S., The Juilliard School, 1969;
A.M., Columbia University, 1973

Gay Brookes
Adjunct Professor of
Language and Education
B.A., New Hampshire College;
A.M., Columbia University,

1962; Ed.M., 1984; Ed.D., 1987
Herman Jie Sam Foek
Adjunct Assistant Professor of Art Education
B.A., Royal Academy of Fine Arts, Antwerp, 1989; M.A., Teachers College, 1998; Ed.D., 2003

James Frankel
Adjunct Assistant Professor of Music Education
B.A., Montclair State University,

1993; M.A., Teachers College,
1996; Ed.D., 2002
Jeanne C. Goffi
Lecturer in Music Education
B.A., Boston University, 1984;
M.A., Boulder, 1988; Ed.D., Teachers College, 1996

Franklin E. Horowitz
Adjunct Associate Professor of Linguistics and Education A.B., Columbia University, 1953; Ph.D., 1971

Robert A. Horowitz
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Teachers College, 1991; Ed.M., 1993; Ed.D., 1994

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Adjunct Professor of
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B.A., Queens College, 1953;
A.M., Columbia University,

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Adjunct Assistant Professor
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B.A., Catawba College, 1974;
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Christian Education, 1982;
M.Div., Union Theological

Seminary in Virginia, 1984;
Ph.D., Princeton Theological Seminary, 1999

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Adjunct Assistant Professor of Arts Administration
B.A., Bucknell University, 1960;
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University, 1963; Ph.D., 1981
Gerardo Pina Rosales
Adjunct Associate Professor of the Teaching of Spanish
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Adjunct Assistant Professor of History and Education
B.A., Douglass College, 1971;
A.M., Columbia University,

1978; M.Phil., 1980; Ph.D., 1983
Hansun Shang Waring
Lecturer
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University, 1992; Ed.M., Teachers
College, 1995; Ed.D., 2000
Jerry Weiner
Adjunct Assistant Professor
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M.A., 1972; Ph.D., CUNY, 1980

Howard A. Williams
Lecturer in Applied Linguistics
B.A., Boston University, 1973;
M.A., University of Washington,

1979; M.A.T.E.S.L., 1986;
Ph.D., UCLA, 1996

Patricia Zumhagen
Lecturer in English Education
B.A., Rivier College, 1956; M.A., University of Toronto, 1991;
Ph.D., Ohio State University, 1999

## Biobehavioral Sciences

Mark Budde
Adjunct Associate Professor of Speech and Language Pathology B.S., Moorhead State University, 1974; M.S.U., University of Wisconsin, 1975; Ed.M.,
Teachers College, 1990; Ed.D., 1992

Catherine Crowley
Lecturer
B.A., University of Rochester,

1975; M.A., Kean College of
New Jersey, 1979; J.D., Rutgers
Law School, 1985
Terry Kaminski
Adjunct Assistant Professor
of Movement Sciences
B.S., SUNY, Syracuse, 1976;

Ed.D., Teachers College, 1986
Carol Kaufman
Adjunct Assistant Professor of Speech and Language Pathology B.S., St. Boston University, 1961;
M.S., Southern Connecticut

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F.M., Uppsala (Sweden), 1968;
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1971; Ph.D., 1978

## Counseling and Clinical <br> Psychology

Jill Backfield
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of Psychology and Education
B.S., Brooklyn College, 1986;
M.S., Teachers College, 1988;

Ph.D., 1996
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Honorary Adjunct Assistant
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M.A., New York University,

1986; Ph.D., 1990
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Honorary Adjunct Assistant
Professor of Psychology and Education
B.A., Harvard University, 1988;
M.A., 1992; Ph.D., Teachers

College, 2000
Michele M. Bartnett
Adjunct Assistant Professor of Psychology and Education B.A., City University of New York, 1971; M.A., Teachers College, 1979; M.A., New York University, 1986; Ph.D., 1992

## FACULTY

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Professor of Psychology and Education
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Ph.D., New York University, 1986; Ph.D., City University of New York, 1992

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Honorary Adjunct Assistant
Professor of Psychology and Education
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Honorary Adjunct Professor of
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Psy.D., 1997
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M.A., Columbia University,

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Honorary Adjunct Assistant
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B.S., Union College, 1975; M.S., Bank Street College, 1978; Ph.D., Teachers College, 1985

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Elizabeth D. Fraga
Lecturer
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University of California, Santa
Barbara, 1998
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Adjunct Professor
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B.A., City College of New York, 1960; M.A., University of
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Honorary Adjunct Assistant
Professor of Psychology and Education
A.B., Stanford University, 1976;
J.D., Denver College of Law,

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University, 1975; M.A., 1975;
Psy.D., Yeshiva University, 1984
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B.S., Ohio State University, 1965;
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College, 1975; Ph.D., 1979
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Honorary Adjunct Assistant
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B.A., Bennington College, 1979;
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York, 1987; M.S., Teachers
College, 1990; M.Phil., 1990;
Ph.D., 1993

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Honorary Adjunct Assistant
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B.A., Purchase College, 1982;

Ph.D., Binghamton University,
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Scott Kellogg
Adjunct Associate Professor of Psychology and Education B.A., Hunter College, 1985; M.A., City College, 1988; Ph.D., The CUNY Graduate Center, 1994

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Adjunct Assistant Professor
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Richard Kestenbaum
Honorary Adjunct Associate
Professor of Psychology and Education
B.A., New York University,

1963; Ph.D., 1968
Beth E. King
Honorary Adjunct Assistant
Professor of Psychology and Education
B.A., Mount Holyoke College,

1977; M.S., Bank Street College,
1980; Ph.D., Columbia
University, 1990
Michael J. Koski
Adjunct Assistant Professor of Psychology and Education B.S., New York University, 1969; M.S., Hunter College, 1973;

Ed.M., Teachers College, 1990;
Ph.D., Columbia University, 1998
Jerome Kosseff
Honorary Adjunct Professor of
Psychology and Education
B.A., City University of New

York, 1939; M.A., Columbia
University, 1941; Ph.D., New
York University, 1951
Elizabeth Krimendahl
Honorary Adjunct Assistant
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B.A., Duke University, 1982;
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Psy.D., 1992

Judith Kuriansky
Adjunct Professor of
Psychology and Education
B.A., Smith College, 1968;

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Honorary Adjunct Assistant
Professor of Psychology and Education
B.A., Brown University, 1983;
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Ph.D., 1990
Laurence R. Lewis
Honorary Adjunct Associate
Professor of Psychology and
Education
A.B., Columbia College, 1959;
M.A., Ph.D., City University
of New York, 1975
Wilma Lewis
Honorary Adjunct Assistant
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B.S., New York University, 1963;
M.A., 1968; Ph.D., University
of Pennsylvania, 1974
Ruth Hedrick Livingston
Honorary Adjunct Assistant
Professor of Psychology and Education
B.A., University of North

Carolina, 1970; M.S., Teachers
College, 1993; M.Phil., 1996;
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1957; Ed.D., Columbia, 1968
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Professor Emeritus of Education B.A., California, Los Angeles, 1957; M.A., California State, Northridge, 1966; Ed.D.,
California, Los Angeles, 1969
Margaret Lindsey
Professor Emeritus of Education B.S., State Teachers College (Shippensburg), 1934; M.Ed., Pennsylvania State, 1939; Ed.D., Columbia, 1946; Litt.D., Eastern Kentucky, 1976

Gordon N. Mackenzie
Professor Emeritus of Education
B.S., Minnesota, 1929; A.M.,

1929; Ed.D., Stanford, 1940
William J. Mahoney
Professor Emeritus of Art and Education
B.S., Columbia, 1948; A.M., 1949; Ed.D., 1957

James L. Malfetti
Professor Emeritus of Education B.S., Columbia, 1947; A.M., 1948; Ed.D., 1951

Elizabeth M. Maloney
Associate Professor
of Nursing Education
B.S., Columbia, 1951; A.M.,

1952; Ed.D., 1966
Dale Mann
Professor Emeritus of Education A.B., California, Berkeley, 1963; Ph.D., Teachers College, 1971

Eugene V. Martin
Associate Professor
of Nursing Education
B.A., Brooklyn College, 1937;
M.A., New York University,

1947; Ph.D., California, Berkeley, 1965

Jack David Mezirow
Professor Emeritus of Adult and Continuing Education
B.S., Minnesota, 1945; A.M.,

1946; Ed.D., California, Los
Angeles, 1955
Roger A. Myers
Richard March Hoe
Professor Emeritus of
Psychology and Education
A.B., Bradley, 1952; A.M.,

Ohio State, 1955; Ph.D., 1959
Harold J. Noah
Gardner Cowles Professor Emeritus of Economics and Education
B.Sc. (Econ.), London, 1946;

Academic Diploma in Education,
1954; Ph.D., Columbia, 1964
Robert Pace
Professor Emeritus
of Music Education
B.S., Juilliard College, 1948;
A.M., Columbia, 1949; Ed.D., 1951
E. Edmund Reutter, Jr. Professor Emeritus of Education A.B., Johns Hopkins, 1944;
A.M., Teachers College, 1948;

Ph.D., 1950
Seymour Rigrodsky
Professor Emeritus
of Speech Pathology
A.B., Brooklyn, 1952; A.M.,

1955; Ph.D., Purdue, 1959
Henry J. Rissetto
Professor Emeritus of Education
B.S., New Jersey State (Trenton),

1949; A.M., Columbia, 1953;
Ed.D., 1957
Ernst Z. Rothkopf
Cleveland E. Dodge Professor
Emeritus of Telecommunications and Education
A.B., Syracuse, 1948; M.A.,

University of Connecticut, 1951;
Ph.D., 1953
Mordecadi Rubin
Professor Emeritus of Spanish A.B., Rutgers, 1955; Ph.D.,

University of Maryland, 1961
Robert J. Schaefer
Professor Emeritus of Education
A.B., Columbia, 1939; A.M.,

1946; Ph.D., 1950

Rosalea A. Schonbar
Professor Emeritus
of Psychology and Education
A.B., Smith, 1940; A.M.,

Columbia, 1942; Ph.D., 1945
Margaret Jo Shepherd
Professor Emeritus of Education
B.S., Illinois, Urbana, 1955;

Ed.M., Illinois, 1958; Ed.D.,
Teachers College, 1968
Douglas Sloan
Professor Emeritus of History and Education
B.A., Southern Methodist

University, 1955; B.D., Yale,
1958; Ph.D., Teachers College, 1969

Frank L. Smith, Jr.
Associate Professor of Education
B.A., Yale, 1958; M.S., Memphis

State University, 1960; Ed.D., Teachers College, 1965

## Jonas F. Soltis

William Heard Kilpatrick
Professor Emeritus of
Philosophy and Education
A.B., Connecticut, 1956; M.A.T.,

Wesleyan, 1958; Ed.D., Harvard,
1964
Marvin Sontag
Associate Professor
of Psychology and Education
B.A., Brooklyn College, CUNY,

1954; Ph.D., New York
University, 1967
William Summerscales
Director of Development and
Associate Professor of Education A.B., Eastern Nazarene, 1944; M.Div., San Francisco

Theological Seminary, 1956;
A.M., Toronto, 1966; Ph.D.,

Columbia, 1969
Abraham J. Tannenbaum

## Professor Emeritus

of Education and Psychology
A.B., Brooklyn, 1946; A.M.,

Columbia, 1948; Ph.D., 1960
Trygve R. Tholfsen
Professor Emeritus
of History and Education
A.B., Yale, 1948; Ph.D., 1952

Craig A. Timberlake
Associate Professor of Music Education A.B., Southern Methodist, 1942 A.M., Columbia, 1963; Ed.D., 1966

Kenneth H. Toepfer
Professor Emeritus of Higher Education A.B., Cornell (Iowa), 1951; M.I.A., Columbia, 1953; Ph.D., 1966

Paul Vahanian Associate Professor of Psychology and Education A.B., Florida Southern, 1949; A.M., Columbia, 1952; Ed.D., 1957

Sloan R. Wayland
Professor Emeritus of Sociology and Education A.B., Hendrix, 1940; A.M., Louisiana State, 1941; Ph.D., Columbia, 1951

Warren Yasso Professor Emeritus of Natural Sciences B.S., Brooklyn College; A.M., Columbia, 1961; Ph.D., 1964

## TRUSTEES

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Lee C. Bollinger
Cory A. Booker
James P. Comer
Joyce B. Cowin Ruth L. Gottesman
Patricia Green
Antonia M. Grumbach
Marjorie L. Hart
Elliot S. Jaffe
John Klingenstein
Jan Krukowski
Arthur E. Levine
Eduardo Marti Claude A. Mayberry, Jr. John Merrow Lorraine Monroe Enid W. Morse Abby M. O'Neill Dailey Pattee Jeffrey M. Peek Charles Prince E. John Rosenwald, Jr. Laurie Tisch
Gillian Neukom Toledo Jay Urwitz
Steven R. Wechsler
Sue Ann Weinberg Christopher J. Willams Bruce Wilcox

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Thomas W. Evans
A. Clark Johnson, Jr.

Thomas H. Kean
Roland M. Machold
J. Richard Munro

Ronald Nicholson
William Parsons
Elihu Rose
Donald Stewart
Barbara Thatcher
Douglas Williams

OFFICERS
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President of the College
TBD
Vice President for Academic Affairs and Dean

Fred A. Schnur, B.B.A., C.P.A.
Vice President for Finance and Administration

Joseph S. Brosnan, Ed.D.
Vice President for Development and External Affairs

Scott Fahey, M.Ed.
Secretary to the College and
Assistant to the President
PRESIDENT'S
ADVISORY COUNCIL
Isaac Blech
Ken Boxley
Dawn B. Duques
Alice Elgart
Kristina Gimbel
Patricia F. Green
Marjorie L. Hart
Jill W. Iscol
Gregory Jobin-Leeds
Nanci Kauffman
Phyllis Kossoff
Douglas Kreeger
Geraldine Laybourne
Alan P. Levenstein
James P. Levy
J. Bruce Llewellyn

Bernard McKenna
Harold Miller
James L. Neff
Morris Offit
Thomas F. Robards
Richard Robinson
Stephen Robert
Elihu Rose
Ron Saltz
H. Marshall Schwarz

Theodore R. Sizer
Janna Spark
Charla J. Tindall
Elizabeth H. Witten
Elaine R. Wolfensohn

## ALUMNI

## COUNCIL

Andre McKenzie, President
Mitchell Barlas
John Battles
Constance Belton Green
Frederick Brodzinski
Richard Campagna
Vicki Cobb
George Coleman
Joshua Endler
Keith Figgs
Lenore R. Gall
Virginia Gonzalez
Jane Herzog
Germain Ludwig
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Patrick McGuire
Hemda Mizrahi
Kathryn Moody
Hasna Muhammad
John Nolan
Marcia Norton
Michael Passow
Jeffrey Putman
Pola Rosen
Christopher Scott
Cynthia Sculco
Joan Shapiro
James J. Shields
Madelon Stewart
Diane W. Sunshine
Leslie Talbot
Adam Vane
Robert Weintraub
Alice Wilder
Dawn L. Williams

# 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. The student population is very diverse and includes international students, scholars and faculty from over 75 countries. Teachers College 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 Teachers College designed to support students' programs of study, provide professional development opportunities, foster community and celebrate diversity.

## OFFICE OF ENROLLMENT AND STUDENT SERVICES (OESS)

Teachers College recognizes the need to focus on its students and provide them with a smooth and seamless experience. The office of Enrollment and Student Services (OESS), established in July 2004, is a student-centered place where students are welcome to share issues, questions and concerns that affect their experience at TC. The Office is led and directed by Associate Dean Don Martin who reaches out through open office hours, email, and town hall meetings among other venues to stay available and connected to students. The following offices are part of the OESS: Office of Access and Services for Individuals with Disabiliaties, Admissions, Career Services, Doctoral Studies, Financial Aid, International Services, Registrar, and Student Activities and programs. The OESS also includes individuals who provide services that include: Student Advertisement, Staff Development, Marketing, Technical Support and the Petrie Fellowship program.

The OESS provides students with a channel through which they may voice questions and concerns about their student experiences. Before meeting with the Manager of Student Advisement in the OESS, students are encouraged to make an effort to resolve their questions and concerns with the appropriate office (s). Student issues raised with our office are documented and kept confidential unless the student indicates otherwise. We are committed to listening to students and helping them navigate College policies, while educating them about appropriate resources at the College. Students with academic concerns related to faculty, courses, grades, cheating, plagiarism, advisement, access to a dissertation sponsor, certification exams, or harassment should be directed to the office of Associate Dean William J. Baldwin in 113 Main Hall or at (212) 678-3052. (For more informatiom regarding the College's Harassment Policy or other College policies, please refer to the Policies and Procedures section of the Catalog.) For more information, call (212) $678-3423$ or email us at oess@tc.columbia.edu

Donald C. Martin, Associate Dean for Enrollment and Student Services 148 Horace Mann, (212)678-8415 dcmartin@tc.edu
www.tc.edu/oess

## DIVERSITY AND COMMUNITY

Janice S. Robinson, Esq. General Counsel
Executive Director, President's Office -
Diversity and Community
Assistant Professor of Higher Education,
Department of Organization and Leadership
128 Main Hall 212-678-3391
JSR167@columbia.edu
http://www.tc.columbia.edu/administration/ diversity
The Office for Diversity and Community leads the President's and College's initiatives concerning community, diversity, civility, equity, and discrimination. The philosophy is to encourage the College community to listen, learn, educate, and work together in collaborative and positive ways. The Office, working with others in the College, addresses issues involving faculty, staff, students, and alumni. These concerns may overlap with potential legal issues (i.e. equity, discrimination, due process, retaliation). Simultaneously, the Office focuses on the systemic issues by addressing policy and procedural concerns.
Ms. Robinson chairs the Committee for Community and Diversity, across-college constituent committee, and serves as a member of the President's Senior Staff. As General Counsel, she is the Colleges' in-house counsel and provides advice and counsel to the president and College employees. She participates in the formulation of College policies involving legal issues, manages the college's legal affairs and supervises outside counsel.
Erwin Flaxman, Ph.D.
Student Ombudsperson
280 Grace Dodge Hall, (212) 678-4169
Flaxman@tc.columbia.edu
http://www.tc.columbia.edu/administration/dive rsity/index.asp?Id=Student+)Ombudsperson
The College Ombudsperson is a resource available to students for resolving problems and conflicts after normal processes have not worked satisfactorily, or when they no longer want to pursue their concerns through normal channels. Students can also meet with the Ombudsperson when they don't know where else to go for help. They should, however, attempt to resolve their problem or register complaints with their advisors, instructors, or staff of College offices before coming to the Ombudsperson.
All parties involved in an issue or resolution of a problem are asked to cooperate with the Ombudsperson.

The Office of the Ombudsperson adheres to all policies and practices of Teachers College and standards of professional practice.

## Services

The Ombudsperson will:

1. Discuss a student's concerns and identify and evaluate options for resolving them.
2. Provide needed information about policies and procedures for dealing with a problem.
3. Investigate a complaint and gather information.
4. Create lines of communication and convene meetings, if necessary, for resolving a student's problem. Please note: The Ombudsperson will always act as a neutral party.
5. Identify a student's problem that requires changes in College policies and procedures.

## Confidentiality

All conversations with the Ombudsperson are strictly confidential and never will be discussed with anyone without the student's permission in writing.

## Impartiality and Independence

The Ombudsperson is an advocate for the solution of the problem, not for any involved party and gives equal attention and protects the rights of all concerned parties.
Doctor Flaxman is also the Ombudsperson for faculty and staff members with concerns. They are encouraged to deal directly with the instructional or administrative officers of the College most directly concerned with the matter first when seeking resolution with a matter. But, they may also consult with the Ombudsperson with any concerns.

## THE OFFICE OF STUDENT

## ACTIVITIES AND PROGRAMS

The Office of Student Activities and Programs (OSAP) 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. OSAP works closely with all student service areas and academic departments to coordinate college-wide new student experience/orientation programs. There is also a strong commitment to promote professional, co-curricular, recreational, social and cultural programs. Activities, such as the Casual
Conversation Series, and doctoral students dinner discussions provide students with the opportunity to hear faculty and administrators share their research interests and professional experiences. Students can also participate in more than over thirty student organizations, which provide additional opportunities for students to network with all members of the College community. The composition of student organizations varies from special interest groups to honor societies to local chapters of national organizations.

They include:

- African Studies Working Group
- American Sign Language Club
- Black Student Network
- Coalition of Latino/a Scholars
- Current Issues in Comparative Education (CICE)
- Education Forum at Columbia
- TC Cultural Studies Initiative
- Kappa Delta Phi (national honor society)
- Korean Graduate Student Association
- Queer TC
- Society and Economics in Education
- Society for Human Resource Management
- Society for International Education
- Student Alliance on Multicultural Mental Health Issues (SAMMI)
- Teachers College Advocates for Sexual Health (TCASH)
For more information, please contact the Office of Student Activities at (212) 678-3690 or email studentactivities@tc.edu.


## HEALTH SERVICES \& INSURANCE

All students living in Teachers College residence halls and all students registered for 12 or more credits residing temporarily and permanently in the 5 boroughs of New York are assessed the health service fee. The fee covers primary care, counseling and psychological services, health education, advocacy and services for students with disabilities, support for survivors of sexual assault, as well as the public health services the department provides to the university community. Additional coverage for medications, lab costs, visits to medical specialists, and hospitalizations are covered by the student insurance plans available through Teachers College. Information is available from the Office of Insurance \& Immunization Records, (212) 678-3006, or email healthimmunization@tc.columbia.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 law does not require you to get immunized; however, you must submit documentation regarding your decision as to whether or not you will be immunized. The required immunization form, which is available in your Teachers College acceptance folder, is to be completed and submitted to the Office of Insurance and Immunization records prior to initial class registration.

## INTERNATIONAL 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 Services (OIS) provides extensive orientation
and intercultural programs throughout the year; information on responsibilities, benefits and alternatives under immigration laws and regulations; counsel on personal, financial, cultural, academic and other concerns; and campus-wide international awareness events. The OIS staff also assists students in contacting campus and community resources when appropriate. In addition, OIS provides visa and orientation services for international visiting scholars, visa services for non-immigrant faculty and 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 163 Thorndike Hall; (212) 678-3939. Interested individuals can contact the staff by email at tcintl@columbia.edu. In addition, prospective, admitted and current students are encouraged to go to www.tc.columbia.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, hearing or mobility impairments, medical conditions or learning disabilities that affect one or more academic activities. A fulltime Director, Assistant Director, and a Program Director of Deaf and Hard of Hearing Services are available to meet with students, arrange accommodations, and advocate on behalf of students with disabilities. For more information call (212) 678-3689, (212) 6783853 (TTY) or visit our website at www.tc.columbia.edu/oasid.

## TEACHERS COLLEGE STUDENT SENATE

The Teachers College Student Senate represents the student body with elected representatives from academic departments and positions at large. The Senate advocates for student voice on campus and participates in col-lege-wide committees which impact the deci-sion-making process and enhances communication amongst students, administration and faculty. For more information please contact the Student Senate at (212) 678-3932 or email student-senate@tc.columbia.edu.

## 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 two
saunas. In addition, there are three tennis courts located on the Morningside Heights campus. Teachers College also houses its own Aquatic Center which is open to all Teachers College and Columbia students and faculty, as well as area neighbors. A registration fee is charged for the use of the facility. The Aquatic Center provides training in swimming, CPR, first aid, and lifeguard training. Times are available for lap and family swimming. For more information please contact the Aquatic Center at (212) 678-3307 or email aquaticcenter@tc.columbia.edu.

## CAREER SERVICES

Career Services provides current students and alumni with the career planning resources essential to all stages of the career development process. Individual consultations and group workshops on career planning and job development equip participants with the skills necessary for identifying career goals, enhancing skills/experience, and designing an effective job search. Students and alumni have online capabilities to search for full-time/parttime career opportunities, internships, and volunteer opportunities, to which they can submit resumes and cover letters directly to employers. Students and alumni can also sign up for on-campus and off-campus interviews, as well. During the Spring semester, two education career fairs are offered, the PreK-12 Education Career Fair and the Northeast Regional Charter School Fair. Not-for-profit organizations also visit the campus in the spring for the Columbia University-sponsored Not-for-Profit and Public Service week of events. Career Services also hosts a programming series called Career Connections which spotlights careers that TC students may wish to explore. These events consist of specialized workshops, panel discussions and networking opportunities with alumni and employers.
Also online, the Alumni Mentoring and Career Networking Program offers a forum in which alumni and students can connect to engage in networking and information sharing. For those students and alumni requiring a centralized location for letters of reference and other pertinent materials for graduate school applications an online service is available. Students and alumni will also find additional resources in the office's on-site Career Resource Library, as well as on the office's website: www.tc.edu/careerservices. Sample resources include: career and job search guides for multiple fields, school directories, educational publications, and graduate study and teacher licensing examination bulletins. Teachers College faculty and administrators can request specialized workshops for their classes and/or academic departments. Career Services is located in 44 Horace Mann, (212) 678-3140, careerservices@tc.edu.


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.

## SAFETY AND SECURITY

Teachers College is located in New York City, one of the most important and dynamic cultural and educational centers in the world. The Office of Safety and Security helps to keep the campus safe and secure, but a truly safe campus can be achieved only through the cooperation of all students, faculty and staff. Security officers are responsible for a wide range of services (visit our web site at www.tc. columbia.edu/security). These include responding to accidents; medical or fire emergencies; investigation and preparation of incident reports; and coordinating police response functions. They are all certified by the state and must pass a state certification exam in order to qualify for a position as a security officer.

Teachers College security officers are on patrol 24 hours a day, 7 days a week, holidays included. Teachers College is located within the 26th Precinct of the New York City Police Department and works cooperatively with them. In addition, institutional security offices, including Columbia University, Barnard College, Union Theological Seminary, and the Morningside Area Alliance, a community agency funded in part by various agencies in Morningside Heights, complement Teachers College Security efforts. Teachers College has more than 60 security video cameras located
on the campus, including the residence halls, which tape and monitor daily activity. For increased security in the residence halls, the buildings are equipped with card swipe access.

## 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 both one-on-one private feebased tutoring and workshops (both group and individual).

For more information please contact the Graduate Writing Center at (212) 678-3003 or email writingcenter@tc.columbia.edu

## 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, Office of the Ombudsperson, ATM and postage machines.


## Degree Requirements

## 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 specializations 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 and at least 16 points to satisfy the recency requirement must be completed. 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. Applications for re-admission follow the same

## 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 <br> Point <br> Requirement | Minimum <br> TC <br> Credit | Maximum <br> Transfer <br> Credit |
| :--- | :--- | :--- | :--- |
| Two Degrees at Teachers College |  |  |  |

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. 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 course work as a means to evaluate the student's continuance within the degree program or at the College. If satisfactory progress is not maintained a student may be dismissed from the program. In addition, a student at the doctoral level whose academic performance in course work and in other requirements is seriously
below the level required for successfully completion of a degree may be denied permission for continued enrollment at the College on the initiative of the Department. Such a decision cannot be made by an individual professor but must be made by the department in which the student is enrolled. There is no formal appeal from such a decision, but the service of the Ombudsperson 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.

Application for Master's Degree or Certificate Award
Candidates for the award of the degree of Master of Arts, Master of Arts in Teaching, 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 $\$ 15$ 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 course work, 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.

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, Spanish, 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 course work 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.

## 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 depart-mental 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 College Teaching of an Academic Subject, and Requirements for the Degree of Doctor of Philosophy. A prospective 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 course work 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 course work 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 readmission 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 minimum of 3 points of Teachers College course credit, 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 Ed.D. Requirements 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 Require-
ments 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. DegreeEach 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 Ph.D. Requirements Bulletin for policy on the dissertation advisement course.) Continuous registration for doctoral advisement is required each autumn 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 readmission 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 the Student Information System on TC-Web. Limited in-person registration is available during dates announced in the Academic Calendar.

Teachers College Touchtone Services and the Student Information System on TC-Web All students are expected to register via the telephone through Touchtone Services or on the web through the Student Information System on TC-Web. 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. Use of Touchtone Services or the Student Information System on TC-Web requires a Personal Identification Number [PIN]. New students will receive PIN numbers from the major department at the time of advisement. Continuing students who did not receive or have misplaced theirs may obtain a PIN by presenting photo identification to the Registrar's Office ( 150 Horace Mann). For security reasons, PIN numbers are not available over the telephone or email. The telephone number to access Touchtone Services is (212) 678-3200. The URL for the Student Information System is https://info.tc.columbia.edu/homepage.htm. Both systems are normally available Mondays-Saturdays from 8 a.m. to 11 p.m.

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 outside the College. Additionally, students are not permitted to be enrolled concurrently in two degree programs 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 autumn or spring term; students who hold full-time positions are discouraged from enrolling for programs in excess of 8 points each autumn 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 autumn, 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 "part-time." "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 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. 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 on TC-Web. 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 on the TCWeb or may be obtained from the Office of 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 on TC-Web. 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 that are offered through the Center of Educational Outreach and Innovation 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.

## Tuition and Fees

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 and fee rates are set annually by the Board of Trustees. Beginning in fall for the 2006-2007 academic year, tuition for all regular courses is $\$ 975$ per point. Non-credit 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's tuition is assessed per point or at a flat rate determined annually by the University's Board of Trustees. Each school's rate may vary. Consult the Office of 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 charged are due and payable in full prior to the first day of classes for each semester. The chart below 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, most major credit cards, and cash. A deferred payment plan, a tuition pre-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 indicate the student identification number and a valid daytime telephone number on the face of the check or money order.

Credit Card Payments-Can be made by using the drop box, in person, by fax, through the Student Information System on TC-Web, or through the College's Touchtone Services. The fax must include the student's name, ID number, the credit cardholder's written authorization and signature, corresponding card type, card number, card expiration date and daytime telephone number of the cardholder. The fax number is (212) 678-4139. Touchtone Services and the Student Information System on TC-Web are generally available 24 hours a day $/ 7$ days a week. To make
payments using Touchtone Services, please call (212) 678-3200. A Personal Identification Number (PIN) and the student's Identification (ID) Number are required to access both Touchtone Services and the Student Information System on TC-Web. To make payments on the web, visit our web site at www.tc.edu/ controller/student-accounts/ then click on the Student Information System link. PINs are provided by the Office of the Registrar each semester. Cash Payments-Must be made inperson 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 8, 2006) for the fall semester and (January 19, 2007) 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 provided on the following page:

## Fall Semester

First Payment on or before (Sept. 08, 2006)

| Second Payment | October 6, 2006 |
| :--- | :--- |
| Third Payment | November 6, 2006 |

## Spring Semester

First Payment on or before (Jan. 19, 2007)

| Second Payment | February 19, 2007 <br> Third Payment |
| :--- | :--- |
| March 19, 2007 |  |

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. Authorized tuition exemption forms must be submitted in person. Avoid a late payment penalty by submitting your tuition exemption forms and any additional payments by the last day of in-person registration. If a student registers late, payment including tuition exemption is 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.

Third Party Agreements-Students enrolling under a third party agreement must submit an authorization form to the College for approval. 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 annually before the start of the academic year.

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 violates the dormitory agreement and may result in eviction. Furthermore, unpaid accounts can be referred to a collection agency.

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 attorneys 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 Student Information System on TC-Web 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 2006
Week ending
September 8
September 15
September 22
September 29
October 6
October 13
October 20
October 27
November 3
after November 3
Spring 2007
Week ending
January 19
January 26
February 2
February 9
February 16
February 23
March 2
March 9
March 16
after March 16

## Percent of refund

100\%
100\%
80\%
75\%
70\%
65\%
55\%
50\%
40\%
0\%

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 the Registrar has their current address. 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

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 autumn 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: | $\$ 320$ |
| Teachers College Research fee: | $\$ 320$ |
| Health Service fee: | Fall: $\$ 356$ |
|  | Spring: $\$ 356$ |
| Medical Insurance fee: |  |
| (Basic) | Fall: $\$ 553$ |
|  | Spring: $\$ 848$ |
| (Comprehensive) | Fall: $\$ 790$ |
|  | Spring: $\$ 1,218$ |
| Application fee: |  |
| (non-refundable and payable at time of application) | $\$ 65$ |
| Library Research fee: |  |
| (for non-college users) per month | $\$ 100$ |
| Continuous Doctoral Advisement registration fee: | $\$ 2,925$ |
| Ph.D. Oral Defense fee: | $\$ 4,319$ |
| Late registration fee: | $\$ 100$ |
| Late application fee for conferring of degrees: | $\$ 15$ |
| Special examination fee (each course): | $\$ 25$ |
| Student identification card replacement fee: | $\$ 20$ |
| Late payment fee (flat fee): |  |
| (monthly fee) 1-1/3\% (16\% annually) | $\$ 50$ |
| Returned check fee: |  |
| Deferred payment plan fee: | $\$ 20$ |
| Tuition deposit fee: | $\$ 50$ |
| 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

## FINANCIAL AID

The goals of the financial aid program at Teachers College are to reward excellence through merit-based aid and to ease the cost barrier of attendance through scholarships and need-based programs including grants, Federal Stafford Loans through the Family Education Loan (FFEL), Federal Perkins Loan and the Federal Work-Study Program. A student must be enrolled at least half-time ( 6 points or the equivalent) in a degree program in order to receive Federal Aid. The Teachers College Office of Financial Aid web site is updated frequently. Please visit the web site at www.tc.columbia.edu/financialaid/ for further information on endowed and external scholarships.

## Scholarships and Grants

Each year Teachers College awards over \$5 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 points 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

Teachers College Minority Scholarships encourage enrollment of students form diverse backgrounds. Program faculty committees make these award decisions based upon academic merit.

## 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 (payroll category 6181) 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.columbia.edu/financialaid/index.asp? $\mathrm{ID}=$ forms\&info $=$ forms. The Grant-in-Aid committee meets monthly from September to June to make awards 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.

The Carroll $\mathcal{E}$ Milton Petrie New York City Teacher Fellowship Program
This fellowship is designed to provide high quality, committed teachers for the New York City public schools, and to bring a new level of prestige to the teaching profession. The Petrie

Fellowship Program is highly competitive and attracts the nation's most talented and enthusiastic students. Awards are based on both academic merit and financial need. Each year, through a highly rigorous selection process overseen by an Advisory Committee made up of eminent figures in education, philanthropy, government, and business, awards are made to ten Petrie Fellows and ten Petrie Finalists. Petrie Fellows each receive up to $\$ 50,000$ award from the Foundation, to cover tuition and some living expenses while they complete a master's degree and requirements for teacher certification. Petrie Finalists receive $\$ 5,000$ awards from the Foundation and an additional $\$ 5,000$ from the College, to apply towards the cost of tuition. Petrie Fellows commit in writing to teaching in a New York City public school for a minimum of five years after graduating from the College.

## 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 three 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.

Nicholson Family Scholarships
Provides support for Teachers College students selected by the Dean and President of the College for outstanding academic merit. This scholarship is available to new students only.

## 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.

## Rose Fellows

These fellowships award up to 18 points of tuition in addition to a stipend to students working as interns under the direction of Teachers College faculty on a project, or set of projects, selected by the donor. Faculty choose the student interns. New and continuing students are eligible.

Teacher Opportunity Corps
Teacher Opportunity Corps (TOC) scholarships are available to New York State residents who are African-American, Hispanic, Native American, or Alaskan American. Recipients must also be U.S. citizens or permanent residents. Applicants must be prospective or experienced teachers who are not yet fully certified to teach in the public schools. To be eligible, recipients must enroll at least half-time in one of the following Teachers College programs: Bilingual/Bicultural Education, Elementary Education, Mathematics Education, Movement Sciences, Music Education, Science Education, Social Studies, Special Education, Teaching of English or Teaching of English to Speakers of Other Languages (TESOL). TOC recipients receive some funding for each academic year of their degree program. A separate application must be made to this program. Additional information and an application can be obtained from the Office of Teacher Education School Based Support Services (212) 678-3502 or online at www.tc.edu/administration/ofss.

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 communications-related fields. More information is available at http://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 http://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 http://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 $\mathrm{K}-6$ level to improve their own professional competence as a classroom teacher of mathematics. More information is available at www.nctm.org/about/met/.
- Ford Foundation Minority Doctoral Fellowships Three-year predoctoral and 12 month dissertation 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 Therapists
Graduate 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/Ascholars.htm.
- National Science Teachers Associationwww.nsta.org/programs/
- New York State Tuition Aid-BOCES ITI-B 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.
- New York State Tuition Assistance Program (TAP) Full-time students (at least 12 points or the equivalent) who are New York State residents may be eligible to apply for the Tuition Assistance Program (TAP). Students who want to be considered for TAP must file a FAFSA, giving the federal government permission to release information to New York State. For more information contact the New York State Higher Education Services Corporation (NYSHESC) at 1-888NYSHESC or at visit their web site www.hesc.com.
- 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.

Loans
There are student loans available to Teachers College students. To qualify for any of the federal education loans, 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 credit-worthy loans from a bank by securing a co-signer 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 web site at www.tc.columbia.edu/financialaid/.

The following loans require a Free Application for Federal Student Aid (FAFSA), a separate loan authorization form and, at times, a promissory note. To ensure consideration for the Federal Perkins Loan and the Federal WorkStudy 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 school. 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.

Stafford Loans
FFEL Stafford Loans are the major form of self-help aid for Teachers College students. FFEL Stafford Loans are available through the Federal Family Education Loan (FFEL)

Program. The terms and conditions of a FFEL Stafford Loan are set by the Federal government. The major differences between the two are the source of the loan funds, some aspects of the application process, and the available repayment plans. Under the Direct Loan Program, the funds for the loan are lent to the student directly by the U.S. government. Under the FFEL Program, the funds are lent to the student from a bank, credit union, or other lender that participates in the FFEL Program.

FFEL Stafford Loans are either subsidized or unsubsidized. Students can receive a subsidized loan and an unsubsidized loan for the same enrollment period.

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.

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.

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 $\$ 18,500$ 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 combined is $\$ 138,500$. Only $\$ 65,000$ 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 provide 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 web site 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 web sites listed below. These web sites 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/ deferffel.jsp?tab=repaying
- United States Department of Education list of federally designated teacher shortage areas: http://www.ed.gov/offices/OSFAP/ Students/repayment/teachers/tsa.html
- 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
Student Employment
Opportunities for student employment are available at Teachers College. Students should inquire at the Teachers College Human Resources Office or visit the web site 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, 2006 through June 30, 2007). New students are eligible to use their awards after they have registered for classes. Continuing students are eligible to begin using their awards as soon as they have received a 2006-2007 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 2006-2007 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 20062007 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 the their federal tax returns and other supporting documents to verify the information on the FAFSA.

New Applicants
Students wishing to apply for scholarships or financial aid will need to complete the Teachers College scholarship application (Please check the Financial Aid web site for instructions and deadlines for completing this application form). Departments make scholarship decisions based on the admissions applications of the new students, and on the Teachers College academic records for the continuing students. Some scholarships do require demonstration of financial need. New students must file a FAFSA to be considered for federal aid.

Continuing Students
Students wishing to apply for scholarships or financial aid will need to complete the Teachers College Scholarship application. (Please check the Financial Aid web site 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.

Note: Students in the Curriculum and Teaching Department will also need to file the Continuing Student Scholarship application with their department by February 1st in order to be considered for internal scholarships in the next academic year. Students in all other departments will automatically be considered for internal scholarship by their department.

## 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 2007-2008 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 2007-
2008 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 wishing to apply for scholarships or financial aid will need to complete the Teachers College application for Scholarship and Financial Aid. (Please check the Financial Aid web site for instructions and deadlines for completing this application form). Departments make scholarship decisions based on the admissions applications of the new students, and on the Teachers College academic records for the continuing students. Some scholarships do require demonstration of financial need. New students must file the FAFSA (if qualify) to be considered for federal aid.

## Continuing Students

Students wishing to apply for scholarships or financial aid will need to complete the Teachers College application for Scholarship and Financial Aid. (Please check the Financia Aid web site 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.

Lifetime Learning Credit
On August 5, 1997, the Taxpayer Relief Act of

1997 was signed into law and created several new tax benefits for families who are saving for, or already paying for higher education.

The Lifetime Learning Credit targets undergraduate and graduate students. Qualifying Graduate students will receive a $20 \%$ tax cred it for the first $\$ 5,000$ of qualified tuition and related expenses for each eligible student in the family, through the year 2002, and for the first $\$ 10,000$ thereafter. This credit is available for net tuition and fees (minus any additional grant aid) paid for an enrollment period beginning July 1, 1998.

Students may consult the IRS web site (www.irs.gov) for current information regarding taxpayer benefits related to education.

## 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 nec essary to adjust the aid package.

During the 2006-2007 academic year, the estimated fall/spring budget for a full-time student enrolled for 24 points was:

| Tuition and Fees | $\$ 23,400$ |
| :--- | ---: |
| $\quad$ Living Allowance | $\$ 21,000$ |
| $\quad$ Books and Supplies | $\$ 2,250$ |
| College Fee | $\$ 640$ |
| Transportation | $\$ 3,600$ |
| Miscellaneous | $\$ 4,400$ |
| Total | $\$ 55,290$ |

The family contribution toward academic year living and educational expenses is then deducted from this budget. For example:

| Budget | $\$ 55,290$ |
| :--- | ---: |
| Family Contribution | $-(9,400)$ |
| Need | $\$ 45,890$ |

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 | $\$ 5,850$ <br> (\$975 per point) |
| :--- | ---: |
|  | $\$ 550$ (NYS |
| residents only) |  |
| Federal Work Study | $\$ 6,000$ |
| Federal Perkins Loan | $\$ 4,000$ |
| Federal Subsidized | $\$ 8,500$ |
| Stafford Loan <br> Federal Unsubsidized <br> Stafford Loan | $\$ 10,000$ |
| Total | $\$ 34,900$ |

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 semes ter; 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 FundsPrior 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.

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 below.)

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 can not begin until awarded.

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 web site at www.tc.columbia.edu/financialaid/, or call (212) 678-3714 to receive more information

| SATISFACTORY ACADEMIC PROGRESS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| After this semester | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $11 \quad 12$ |
| Points Master's students must complete: | 6 | 15 | 27 | 39 | 51 | 53 | 63 | 63 | 63 | 63 | No longer eligible |
| Points Doctoral students must complete: | 6 | 15 | 27 | 39 | 51 | 63 | 75 | 87 | 90 | 90 | Dissertation <br> Advisement |
| With at least this GPA: | 2.5 | 2.5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |



# Policies and Procedures 

## Definition of Point Credit

A point (equivalent to a semester hour) is the unit of College credit. For the typical student, a point of credit is earned by a minimum of two-and-one-half hours per week total time in lecture, laboratory, library, and outside work. These weekly two-and-one-half hours usually consist of: (1) attendance for a fall or spring term equal to one hour weekly in lectures or recitations or two hours in practical work, and (2) one-and-onehalf hours additional work for each lecture, or one-half hour extra for each two-hour laboratory period. On this basis, a typical student with a 16 point program works a total of forty hours per week in classes and in outside preparation. These 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 announcement for each special event, as published by the Center for Educational Outreach and Innovation.

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 the

Registrar 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 University, 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 Associate Dean of Academic Administration, William J. Baldwin, in 113 Main Hall.

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.

Teachers College Visiting Scholar Privileges Teachers College is host to many visitors and others who do not hold academic appointments at the College but use its facilities and participate in its activities. To accommodate the needs of these individuals and recognize their contribution to its intellectual life, The College confers Visiting Scholar status, with limited rights and privileges, according to the policies and procedures described below.

Visiting Scholars generally hold a Ph.D. (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 regular faculty appointment at their employing institution. Included are 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.

Staff and doctoral students from U.S. and foreign universities and government ministries who are engaged in research in a field of special interest to a Teachers College faculty member may also be invited by the College and granted Visiting Scholar privileges.

Others eligible for Visiting Scholar status include Teachers College doctoral alumni; officials and former officials of government or non-government organizations, such as the United Nations and their affiliates; practicing professional and creative artists; and such other persons as will contribute to the intellectual activity of Teachers College, as approved by the Associate Dean for Academic Administration.

Visiting Scholar status is conferred on behalf of the Dean by the Associate Dean for Academic Administration or the Director of International 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 vitae 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 Dean.

Visiting Scholar privileges are limited to auditing courses with the permission of the instructor, attending open lectures, a university email account and all services at Teachers College libraries. Privileges at other Columbia libraries are not included. Information about access to other University libraries may be obtained at the Library Information Office, 201 Butler Library.

Individuals may be granted Visiting Scholar status for up to one year. The designation ordinarily 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, and they are not eligible for Teachers College housing or Columbia University Health Services/Medical Insurance. They may not be paid compensation from a Teachers College account, given a fellowship or be reimbursed for expenses without prior approval of the Associate Dean or Director of International Services. They may receive an honorarium for participating in a conference or giving an occasional lecture if they are United States 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 International 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 F-1 or J-1 student status are not granted Visiting Scholar privileges and are required to be full-time students. Contact International Services for more information.

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 U.S. government, International Services will issue a DS-2019 form 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 the DS-2019) is available from International Services. This office can provide complete details on complying with these requirements.

An individual interested in Visiting Scholar status should contact: Visiting Scholar Program, c/o
Office of International Services, Teachers College, Box 308, New York, NY 10027. Phone: (212) 678-3939. Fax: (212) 678-3681. Email:
Boultbee@ tc.edu. Please include a curriculum vitae and brief description of proposed research with all inquiries. Web:
http://www.tc.columbia.edu/international/Scholars -Faculty/index.htm

## Accreditation

All Teachers College programs are registered with New York State Education Department. Teachers College is accredited by the Middle States Association of Colleges and Schools. 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-Hearing-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 Psychologists (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
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, upon presentation of the certified doctoral candidate card, 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 Dean of the College.

Some of the major holidays occurring during the current academic year are:

## Rosh Hashanah Id al Fitr

Yom Kippur Passover
First days of Succoth Good Friday Concluding days of Succoth Id al Adha Hanukkah Shavuoth
The Jewish and Islamic holy days begin at sundown 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.

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, an official Columbia University (CUNIX) email address is required for all students. Teachers College will
send official communications to the CUNIX email address, which is based upon the University Network ID (UNI) assigned to the student (for more information about CUNIX email and the UNI, please see Email and Network Access under Computing and Technology on the TC homepage or browse to: http://www.tc.columbia.edu/computing/EmailNet.asp.

Teachers College expects that every student will receive email at his or her Columbia University email address and will read email on a frequent and consistent basis. A student's failure to receive 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 CUNIX email address. Students who redirect email from their official University 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 http://www.tc.columbia.edu/computing/aupolicy

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.


## 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 on April 27, 1984. 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

## Policies And Procedures

what is generally expected of graduate students.
$\mathrm{C}+$ 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 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, 150 Horace Mann. 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-of-
program 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. 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 three-course 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. As of the Fall Term 2004, the Faculty has approved the following change in the policy on Incomplete grades. 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 reenroll 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 and payment of the required fees. The fee for one transcript is $\$ 5$; plus $\$ 3$ for each additional transcript in the same order. 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.

Requests from Federal agencies about a student's record for employment purposes are acknowledged when the student's written authorization is on file.

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 an official, 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. 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); 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 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 or University may release "directory information" with respect to a student. The University and College are required to give notice of the categories of information which it will treat as "directory information". Accordingly, the College hereby gives notice that is has designated the following categories of information as directory information with respect to each student: name, mailing, campus and permanent addresses, photo, email address, UNI, major field of study, dates of attendance at the College, degrees conferred and their dates, dissertation titles and dissertation committee members and master's essay titles 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.
6. Upon written request by a student, the College will/may release information in a student's educational records at Teachers College to third parties. The student should make a request in writing with the student's signature for such release to the Office having custody of the record involved. 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. In general, the charge will not exceed 20 cents per page except that the charge for a transcript is $\$ 5.00$. 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 not permit employees and agents to use such information but only for the purpose for which the disclosure was made.

## 7. Students may obtain copies of these

"Guidelines and Statement of Policy" of the Federal Educational Rights and Privacy Act (FERPA) at the Office of the Associate Dean of Academic Administration, 113 Main Hall. Questions about the interpretation of the Guidelines should be referred to the Registrar, 150 Horace Mann.

## Academic Discipline

Student admission, continuance upon the rolls of the College, receipt of academic credits, graduation, and the conferring of any degree or diploma shall be strictly subject to the disciplinary powers of the College, which shall be free to cancel registration at any time, on and grounds in which it deems advisable, subject to student appeal procedures where applicable as described in the Student Rights and Responsibilities, in the Student Handbook.

## Student Conduct Code

While Teachers College does not operate on the basis of detailed regulations and processes, it does expect its members to observe traditional canons of scholarly discourse, academic behavior, and due process. All members of the College Community are expected to exhibit the high level of personal integrity which society must demand of professionals. Copies of the procedural guidelines proposed in the Joint Statement on the Rights and Freedoms of Students are available in the Office of Enrollment and Student Services, 148 Horace Mann, (212) 678-3423.

Teachers College insists on the greatest degree of freedom of inquiry, teaching, learning and expression for all its members. The exercise of these rights, however, must not violate the free exercise of the same rights by other members of the community. Thus, activities which disrupt the regular and essential operations of the College and/or Columbia University are not permitted.
Students or other members of the University community may register charges of violating these standards with the Office of the Associate Dean of Academic Administration (113 Main Hall). 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 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 revocation of permission to visit the Columbia campus or use its facilities and suspension or dismissal from Columbia courses in which a Teachers College student may be enrolled. A Guide to Student Rights and Responsibilities, obtainable section published in the Student Handbook, is available to all members of the Teachers College
community. It provides details concerning the procedures to be followed which are required when a charge is made against a student. Please note: The grievance procedures are currently under review and wil be published on the Student Activities and Programs web site at http://www.tc.columbia.edu/stlife/ as soon as it becomes available.

## NOTICE OF NONDISCRIMINATORY POLICY AS TO STUDENTS AND EMPLOYEES

Pursuant to Revenue Procedure 75-50 dated December 8, 1975, and Title IX of the Education Amendments of 1972 ("Title IX") and part 86 of the Department of Health and Human Services regulations promulgated to effectuate Title IX, and The Americans with Disabilities Act of 1990, Teachers College hereby gives notice of its nondiscriminatory policy as to students and employees:
Continuing its long-standing policy to support actively equality for all persons, Teachers College does not discriminate on the basis of race, creed, color, religion, sex, sexual orientation, marital status, national origin, citizenship status, ancestry, age, veteran status, military status, disability, pregnancy and gender expression and/or identity or any other class protected by federal, state or local laws in the administration of its admission, 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, creed, color, religion, sex, sexual orientation, marital status, national origin, citizenship status, ancestry, age, veteran status, military status, disability, pregnancy and gender expression and/or identity or any other class protected 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.

Inquiries regarding the application of Title IX of the Educational Amendments of 1972, as amended, and regulations there under, to any policy, program or other activity of the College should be directed to the Director of Human Resources, who serves as the College's Equal Opportunity Officer. The Director is also designated to coordinate the College's compliance activities under the Age Discrimination in Employment Act of 1967, as amended, and the Age Discrimination Act of 1975, and can be contacted through the Office of Human Resources, Box 149, 112 Main Hall, 525 West 120th Street, New York, NY 10027, Telephone (212) 678-3175.
Inquiries regarding the application of Section 504 of the Rehabilitation Act of 1973, as amended, and regulations thereunder, to any policy, program or other activity of the College should be directed to Associate Dean William J. Baldwin who is designated as the College's Section 504 and The Americans with Disabilities Act Compliance Officer.
Office of the Associate Dean, Box 151, 113 Main Hall, New York, NY 10027, Telephone (212) 678-3052.

| PROGRAM TITLE | HEGIS** | AWARD | PROGRAM TITLE | HEGIS** | AWARD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Biology (7-12) | 0401.01 | M.A. | Education Psychology: |  |  |
| Computing in Education | 0799 | M.A. | Human Cognition and Learning | 0822 | M.A., Ed.D., |
| Inclusive Elementary |  |  |  |  | Ph.D. |
| Education | 0802 | M.A. | Applied Educational Psychology: |  |  |
| Higher and Postsecondary Education | 0805 | M.A., Ed.M., | Reading Specialist | 0822 | M.A. |
|  |  | Ed.D. | School Psychology |  |  |
| Adult Education Guided |  |  | (Applied Developmental |  |  |
| Intensive Study (AEGIS) | 0807 | Ed.D. | and Learning Psychology) | 0822 | Ed.M. |
| Adult Learning and Leadership | 0807 | M.A., Ed.M., | School Psychology |  |  |
|  |  | Ed.D. | (Applied Educational Psychology) | 0822 | Ed.D., Ph.D. |
| Inclusive Elementary Education-Dual | 0808 | M.A. | Early Childhood Education | 0823 | M.A., Ed.M., |
| Teaching the Severe and |  |  |  |  | Ed.D. |
| Multiple Handicapped | 0808 | M.A. | Early Childhood Special Education | 0823 | M.A., Ed.M. |
| Instructional Practice in |  |  | Applied Statistics | 0824 | M.S. |
| Special Education | 0808 | Ed.M. | Resource Management/ |  |  |
| Special Education* $\dagger$ | 0808 | Ed.D., Ph.D. | Education Leadership $\dagger \dagger$ | 0827 | Ed.D./ |
| Guidance and Habilitation | 0808 | M.A. |  |  | M.B.A. |
| Supervision of Special |  |  | Education Leadership | 0827 | M.A., Ed.M., |
| Education | 0809 | Ed.M. |  |  | Ed.D., Ph.D. |
| Administration of Special |  |  | Inquiry in Education |  |  |
| Education Programs* | 0809 | Ed.D. | Leadership Practice | 0827 | Ed.D. |
| Mental Retardation and Elementary/ |  |  | Curriculum and Teaching | 0829 | M.A., Ed.M., |
| Childhood Education | 0810 | Ed.M. |  |  | Ed.D. |
| Mental Retardation and Early |  |  | Literacy Specialist (Birth-Grade 6) | 0830 | M.A. |
| Childhood Education | 0810 | Ed.M. | Art and Art Education | 0831 | M.A., Ed.M., |
| Mental Retardation* $\dagger$ | 0810 | M.A. |  |  | Ed.D., |
| Gifted Education* | 0811 | M.A. |  |  | Ed.D.C.T. |
| Deaf and Hard of Hearing* $\dagger$ | 0812 | M.A., Ed.M. | Music and Music Education | 0832 | M.A., Ed.M., |
| Blindness and Visual Impairment* | 0814 | M.A., Ed.M. |  |  | Ed.D., |
| Applied Behavior Analysis* $\dagger$ | 0816 | M.A. |  |  | Ed.D.C.T. |
| Learning Disabilities: |  |  | Mathematics Education | 0833 | M.A., M.S., |
| Teaching Students with |  |  |  |  | Ed.M., |
| dis/Abilities* $\dagger$ | 0818 | M.A. |  |  | Ed.D., |
| Disability Studies in Education | 0818 | M.A. |  |  | Ed.D.C.T., |
| Physical Disabilities* $\dagger$ | 0819 | M.A. |  |  | Ph.D. |
| History and Education | 0821 | M.A., Ed.M., | Science Education <br> Teacher Education in Science | 0834 | Ed.D., Ph.D. |
|  |  | Ed.D., Ph.D. |  | 0834 | M.S., Ed.M. |
| Philosophy and Education | 0821 | M.A., Ed.M., | Supervisor/Teacher of |  |  |
|  |  | Ed.D., Ph.D. | Science Education | 0834 | M.A. |
| Psychology in Education | 0822 | M.A. | Applied Physiology | 0835 | M.A., Ed.M., |
| Applied Educational Psychology: |  |  |  |  | Ed.D. |
| Cognitive, Behavioral, and |  |  | Motor Learning | 0835 | M.A., Ed.M., |
| Developmental Analysis | 0822 | Ed.M. |  |  | Ed.D. |


| PROGRAM TITLE | HEGIS** | AWARD | PROGRAM TITLE | HEGIS** | AWARD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Curriculum and Teaching in Physical Education | 0835 | M.A., Ed.M., Ed.D. | Communication and Education | 1506 | Ed.D. |
|  |  |  | Teaching of English to Speakers |  |  |
| Physical Education | 0835 | M.A. | of Other Languages | 1508 | M.A., Ed.M., |
| Kinesiology | 0835 | Ph.D. |  |  | Ed.D., |
| Applied Physiology and Nutrition | 0837 | M.S. |  |  | Ed.D.C.T. |
| Health Education | 0837 | M.A., M.S., | Teaching of English to Speakers |  |  |
|  |  | Ed.D. | of Other Languages (Japan) | 1508 | M.A. |
| International Educational |  |  | Physics (7-12) | 1902.01 | M.A. |
| Development | 0899 | M.A., Ed.M., Ed.D. | Chemistry (7-12) | 1905.01 | M.A. |
|  |  |  | Earth Science (7-12) | 1917.01 | M.A. |
| Comparative and International |  |  | Clinical Psychology | 2003 | M.S., Ph.D. |
| Education | 0899 | M.A., Ed.M., | Counseling Psychology | 2004 | Ed.D., Ph.D. |
|  |  | Ed.D., Ph.D. | Psychological Counseling | 2004 | M.A., Ed.M. |
| Instructional Technology and Media | 0899 | M.A., Ed.M., Ed.D. | Economics and Education | 2204 | M.А., Ed.M., |
|  |  |  |  |  | Ed.D., Ph.D. |
|  |  |  | Social-Organizational Psychology | 2005 | Ph.D. |
| Technology Specialist | 08993 | M.A. | Measurement and Evaluation | 2007 | Ed.M., |
| Bilingual/Bicultural Education | 0899 | M.A. |  |  | Ed.D., Ph.D. |
| Program in Law and |  |  | Psychology: Organizational | 2008 | M.A. |
| Educational Institutions | 0899 | Ed.M. | Psychology: Developmental | 2009 | M.A. |
| Neuroscience and Education | 0899 | M.S. | Developmental Psychology | 2009 | Ed.D., Ph.D. |
| Arts Administration | 1099 | M.A. | Teaching of Social Studies | 2201 | M.A., Ed.M., |
| Dance and Dance Education | 1008 | M.A. |  |  | Ed.D., Ph.D. |
| Teaching of Spanish | 1105 | M.A., Ed.M., | Applied Anthropology |  |  |
|  |  | Ed.D., | (In Cooperation with GSAS) | 2202 | Ph.D. |
|  |  | Ed.D.C.T., | Anthropology and Education | 2202 | M.A., Ed.M., |
|  |  | Ph.D. |  |  | Ed.D., Ph.D. |
| Teaching of ASL as a |  |  | Politics and Education | 2207 | M.A., Ed.M., |
| Foreign Language | 1199 | M.A. |  |  | Ed.D., Ph.D. |
| Nursing Education: Professorial Role Nursing Education/Nurse Executive | 1203.10 | M.A., Ed.D. Ed.D. | Sociology and Education | 2208 | M.A., Ed.M., |
|  | 1203.10 |  |  |  | Ed.D., Ph.D. |
| Nurse Executive |  |  | Interdisciplinary Studies in |  |  |
| (Accelerated Program) | 1203 | M.A. | Education | 4999 | M.A., Ed.M., |
| Speech and Language Pathology | 1220 | M.S., Ed.M., Ed.D., Ph.D. |  |  | Ed.D. |
|  |  |  |  |  |  |
| Nutrition Education | 1306 | M.S., Ed.D. |  |  |  |
| Nutrition and Public Health | 1306 | M.S., Ed.D. | * Ed.D. in Special Education may be acquired through these programs. <br> $\dagger$ Ph.D. in Special Education may be acquired through these programs. <br> $\dagger \dagger$ Joint M.B.A. offered by Columbia School of Business. |  |  |
| Community Nutrition Education | 1306 | Ed.M. |  |  |  |  |  |
| Teaching of English | 1501 | M.A., Ed.M., <br> Ed.D., <br> Ed.D.C.T. | ** 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. |  |  |
| English Education | 1501 | Ph.D. |  |  |  |  |  |
| Applied Linguistics | 1505 | M.A., |  |  |  |  |  |
|  |  | Ed.M., Ed.D. |  |  |  |  |  |

A
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[^0]:    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

[^1]:    * Pending approval by New York State Education Department.
    ***After testing and two years of teaching, one is eligible for Professional Certification.
    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.

[^2]:    ## ***NOTICE***

    Effective 2006-07, the following courses will be offered through the Department of Organization and Leadership as ORL courses, instead of HUDM courses. Specifically, ORL 5522, Evaluation Methods I will be replacing HUDM 5055, Evaluation of Institutions, Programs and Curricula I; ORL 5523, Evaluation Methods II - Seminar, will replace HUDM 5055 , Evaluations of Institutions, Programs and Curricula II; and ORL 5524, Instrument Design and Validation will replace HUDM 5053. Please look under ORL listings for updated course descriptions and semester information.

    ## ORL 5522

    Evaluation Methods I
    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 3 -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
    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 3 -course sequence in assessment and evaluation methods offered through the Organization and Leadership department. The prerequisite is ORL 5522 Evaluation Methods I or an instructor-approved substitute. Offered once biennially, typically in fall.

    ## ORL 5524

    Instrument Design and Validation - Seminar
    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.

