TEACHERS COLLEGE COLUMBIA UNIVERSITY

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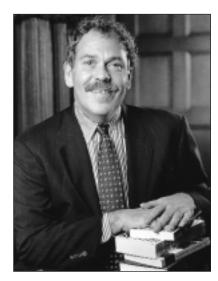
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DEFINING THE WORK OF EDUCATORS

Soon after being named president of Teachers College, I received a letter from a well-known educator suggesting the College change its name. The author reasoned that Teachers College is the largest and most comprehensive graduate and professional school of education in the country.

Teachers College focuses on education in the broadest sense of the word—in and out of the classroom and across the life span. A third of our students are in teacher preparation programs. The rest are planning on careers in administration, policy, research and teaching in fields ranging across education, health and psychology.

The proposal certainly had merit, but it was at the same time impossible. The most valuable possession we have at Teachers College is our name. The name summons a powerful historical legacy. Teachers College began almost a century ago with the radical mission of preparing a new breed of professional educators. In the years since, Teachers College has been a leader in defining the



Arthur E. Levine,
President,
Teachers College,
Columbia University

TOP RANKED IN U.S. NEWS & WORLD REPORT SURVEY

In the 2002 rankings of U.S. News & World Report, Teachers College received the highest rating—4.7 out of a possible 5.0—of any education school in a survey of school superintendents. In overall rankings, Teachers College was fourth, separated by just five points behind Stanford University, Harvard University and the University of California at Los Angeles. Teachers College also was ranked in the top ten in such specialties as Curriculum/Instruction, Educational Psychology, Educational Policy, Elementary Education, Secondary Education and Higher Education Administration.

work of educators and the nature of their field. It has attracted to its faculty the greatest minds in education and educated the students who have led the field.

The name Teachers College also stands for a vital and enduring mission.

For more than 100 years, the College has been committed to:

- Engage in research on the central issues facing education.
- Prepare the next generation of leaders of education.
- 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.

We live in an age in which our world is changing dramatically and quickly. Our educational institutions and the educators who lead them are being buffeted by demographic, economic, global and technological change.

Our work at Teachers College today, as it was yesterday, is to create the programs, carry out the research and develop the models that will guide educators and the institutions they serve. Should you decide to join us as graduate students, you will share in the excitement of an environment for learning on the leading edge of educational reform and innovation.

Arthur E. Levine

President

Teachers College, Columbia University



A STRATEGY OF ENGAGEMENT

"If there is an abiding philosophy that best characterizes Teachers College it is engagement. A founding principle of Teachers College, this concept of engagement is embodied in a constant cycling of theory and practice designed to improve the environment for learning in the society at large. It is played out in the teaching, research, training and consulting that engage our faculty and the learning, internships, practice teaching and clinical projects that engage our students. The classroom becomes the forum for faculty and students alike where concepts, theories, tools and skills are integrated to give perspective and purpose to the education issues we address. It is the ultimate expression of learning by doing."

CRAIG E. RICHARDS, Professor of Education

A LEADERSHIP ROLE

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 persist in lifelong learning.

This vision, renewed and invigorated to meet the 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 once again are poised to prepare our students for leadership in an age of education where uncertainty reigns and the need for reform rules.

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 learning for all students regardless of their status or station. The other is in



Craig Richards, Professor of Education

preparing educators who not only serve students directly but coordinate the educational, psychological, behavioral, technological, and health initiatives to remove the barriers and impediments to learning at all ages.

In that regard, we have streamlined our own academic organization to be more responsive to the ideas and interests of our institutional community. By housing programs that complement and reinforce each other in a welcoming department, we are giving faculty and students alike exposure across disciplinary fields and opening up dialogues that encourage

the discussion of different and competing points of view.

Because we are a graduate school, our students have greater contact with faculty members as academic colleagues and more opportunities to pursue independent or faculty-sponsored research and scholarship. Moreover, we have reinforced our commitment to strengthen the linkages between theory and practice.

Whatever career path is taken by Teachers College graduates, we want them to understand the real world issues likely to be encountered as professionals and be prepared to address the critical areas that determine the fate and future of education covering all of its scope and reaching all of its levels.

By the same token, we are providing practicing professionals already in leadership roles with the new thinking and approaches demanded in a society weathering serious traumas to its institutional structures.



TEACHERS COLLEGE, WHAT IT IS AND WHERE IT IS

"Teachers College offers students more than a degree, as important as that is. What really distinguishes the College is what it is and where it is. Where it is, is in New York City where our students study the array of educational problems and policies played out in real classrooms filled with students of all backgrounds. What it is, is a community of scholars where students join with faculty as colleagues to present and discuss front-line issues of education. In fostering school reform, we believe in making a difference in the classroom where learning takes place. Our role is not to dispense community service nor focus on deficits, but to recognize and build on the unrealized strengths that youngsters bring to the classroom."

JAMES H. BORLAND, Associate Professor of Education and Chair of the Department of Curriculum and Teaching

THE LEARNING ENVIRONMENT

In its new configuration, Teachers College has organized its academic programs into nine departments augmented by centers, institutes and projects that reinforce instructional areas with research, service, and experiential initiatives. No longer do overarching issues remain imbedded in curtained-off disciplines, but are vigorously and provocatively explored in an interdisciplinary and holistic context.

For organizational purposes, we have established nine departments, including Departments of:

- Arts and Humanities
- Biobehavioral Sciences
- Counseling and Clinical Psychology
- Curriculum and Teaching
- Health and Behavioral Studies
- Human Development
- International and Transcultural Studies
- Mathematics, Science and Technology
- Organization and Leadership

Here, then, in summary form, is a

review of the scope and depth of the learning environment at Teachers College (see succeeding sections for more detailed descriptions).

IDEAS AND INFORMATION

Department of Arts and Humanities
Teachers College is heavily invested in
the intellectual interests and creative
ideas that extend beyond the traditional concerns of schooling to engage
human endeavors across the lifespan.
Our concerns are the values and
philosophies underpinning contemporary school reform. What that means

in educational terms is an emphasis on inquiry to explore and analyze competing ideas; a focus on habits of mind to develop and sustain critical thinking; and the role of discovery in expanding our store of knowledge.

Crucial in establishing this foundation for lifelong learning are academic programs in the Department of Arts and Humanities. Concentrations in the Arts include Art and Art Education, Arts Administration, Dance and Dance Education, and Music and Music Edu-

James H. Borland, Associate Professor of Education



UNDERSTANDING CHILDHOOD DEVELOPMENT

"The role of psychology in education is to help teachers understand childhood development and its impact on the educational process. In particular, psychologists play a critical role in providing teachers with insights in how children experience feelings of attachment and separation, peer cooperation and conflict. And, in classroom encounters, teachers need support in dealing with problem youngsters, socialization of the classroom, stress, parent-teacher relationships, and the pressures and influences in outside communities where youngsters are raised. Along with our focus on children, we also help teachers overcome the stress inevitably associated with teaching. The question is whether teachers have enough coping mechanisms or sufficient rewards to handle stress before it leads to burnout."

BARRY FARBER, Professor of Psychology and Education



Barry Farber, Professor of Psychology and Education, leading a seminar on the role of psychology in the educational process across the lifespan.

cation. Humanities houses concentrations in Applied Linguistics, History and Education, Philosophy and Education, Religion and Education, Social Studies, Teaching of English and English Education, Teaching of English to Speakers of Other Languages (TESOL), and Teaching of Spanish.

Associated research and service forums include the Center for the Arts, Social Imagination, and Education, the Center for Arts Education Research, and the Center for the Study of the Spiritual Foundations of Education.

FUNCTION AND COMMUNICATION

Department of Biobehavioral Sciences Biological deficits often profoundly limit the capacity of youngsters and adults alike to function and communicate fully in school and in the lifetime that follows.

To address such issues, the Department of Biobehavioral Sciences includes such programs as Applied Physiology, exploring the physiological effects of exercise and training to improve health and physical fitness; Motor Learning, the development, acquisition, and control of motor skills; Neurosciences, focusing on brain-behavior relationships and their application in education; Physical Education for those interested in teaching, fitness management, and coaching; and Speech-Language Pathology and Audiology, providing therapeutic approaches to minimize and correct speech, language, and hearing disorders.

In that regard, the Edward D. Mysak Speech-Language and Hearing Center offers evaluation and therapy services to individuals with speech, voice, language, or hearing problems.

MENTAL HEALTH CONCERNS

Department of Counseling and Clinical Psychology

The Department of Counseling and Clinical Psychology focuses on the psychological and mental health concerns experienced by children, adolescents, and adults in family, school, community, and work situations.

The program in Clinical Psychology explores the etiology and treatment of such maladaptive behaviors as drug and alcohol abuse, violent and high-risk conduct, depression, schizophrenia, and child abuse.

Counseling Psychology concentrates on less severe problems in living as well as on normal developmental patterns of identity formation (including racial and gender identity), and vocational choice.

The academic programs are reinforced by research, community interventions, and practica offered through the auspices of the Center for Education and Psychological Services.

RESTRUCTURE AND REFORM

Department of Curriculum and Teaching

Teachers College is a pioneering presence in restructuring and reforming our educational systems. The College engages in research and develops pilot projects to create model school environments where teaching standards are met and learning expectations are realized.

In the Department of Curriculum and Teaching and associated centers and institutes, Teachers College places a high priority on the initiatives that lead to reasserting leadership in education. Central among them are promoting an understanding of teaching and learning processes for learners from birth to adulthood; enhancing the reading and writing skills of youngsters; breaking down bureaucratic barriers to foster school-based reforms; giving administrators and teachers the backing and resources to develop creative learning concepts; helping educators meet the needs of exceptional children in inclusive settings; and instituting academic rigor and accountability to encourage high performance standards.

The departmental programs include Curriculum and Teaching, Early

Childhood Education, Early Childhood/Special Education, Elementary/Childhood Education (Preservice), Gifted Education, Learning Disabilities and Reading and Learning Disabilities.

Research and service support for its academic programs come from the Hollingworth Center for Study and Education of the Gifted, National Center for Restructuring Education, Schools, and Teaching (NCREST), and the Reading and Writing Project.



A VARIETY OF APPROACHES TO TEACH HEARING IMPAIRED CHILDREN

"In preparing teachers to work with hearing impaired children, I take the politically incorrect position that there is more than one way to teach the deaf or hard of hearing student. Therefore, if a child is oriented orally, I encourage teachers to emphasize lip reading and the spoken word. Should signing be dominant, I recommend maximizing ASL or American Sign Language. My allegiance is to the child, not the communication modality. Teachers should pursue whatever is best and works best for the child. To achieve that balance, I stress the fact that the hearing impaired population is incredibly heterogeneous. No two deaf persons are the same. So we treat different people differently."

ROBERT E. KRETSCHMER, Associate Professor of Education and Psychology

HEALTH AND LEARNING

Department of Health and Behavior Studies

Health and learning are inextricably intertwined. Optimal learning cannot take place in an atmosphere rife with physical, psychological, social, and health problems. On the other hand, optimal health cannot be achieved without learning skills and literacy.

The Department of Health and Behavior Studies seeks to enhance one's learning potential by overcoming health-related constraints and other barriers to literacy. Components of that approach include programs in Applied Educational Psychology, Health Studies, and Special Education.

Academic interests are complemented by the research and service of the Center for Health Promotion, Center for Education and Psychological Services, and Center for Opportunities and Outcomes for People with Disabilities.

DEVELOPMENT AND RESEARCH

Department of Human Development Teachers College has been producing scholars in the social sciences for almost 100 years. Now, however, the challenge is greater than ever before to develop theories and methods of social science—particularly psychology and sociology—that can be used to promote the development and well-being of infants, children, and adults; help teachers understand their students' learning and intellectual abilities; develop and evaluate intellectually stimulating and effective programs of instruction, and assure that the benefits of education for all individuals, especially the disadvantaged, whose ability to gain from education may be at special risk.

The Department of Human Development is dedicated to meeting this challenge through the multi-disciplinary study of development and education across the lifespan and in the social contexts in which they occur.



Robert E. Kretschmer, Associate Professor of Psychology and Education

That pursuit finds expression in such programs as Developmental Psychology; Cognitive Studies in Education; Measurement, Evaluation and Statistics; Psychology in Education, and Sociology and Education. A forum associated with human development issues is the Center for the Study of Young Children and Families.

A WORLD VIEW OF EDUCATION

Department of International and Transcultural Studies

What once stood as a world with well-defined jurisdictional borders now is unable to withstand the flow of populations, information, ideas, goods, and services across national

CHANGE AGENTS FOR SOCIAL JUSTICE

Newly installed as Vice President for Academic Affairs and Dean of Teachers College, Darlyne Bailey says she wants "to enhance this venerable institution's commitment to community and social justice, strengthen the public policy agenda for education and get the 'best and the brightest' out into the world to join forces with others to change the quality of the human condition. I see this as my personal mission."

boundaries. While geographic designations remain, the rush of technological advances has removed long-standing barriers to new forms of communication.

What has emerged is a diversification of people and resources that is transcultural in context and international in scope, operating across as well as within national boundaries. Increasingly, a global presence, transcultural and international forces are crucial in understanding education in every domain of human experience. Thus, the Department of International and Transcultural Studies is a pioneering force in this field with a program focus on Comparative and International Education/International Education Development, Bilingual/ Bicultural Education, and Economics and Education, Anthropology and Education and Applied Anthropology. Added institutional elements are the Elbenwood Center for the Study of Family as Educator, Institute on Education and the Economy, Institute of International Studies and the Center on Chinese Education.

ADVANCES IN FRONTIER THINKING

Department of Mathematics, Science and Technology

Societies and cultures are settings within which science, mathematics, technology and communications media develop and the forces that frame the work they are to do. Technological developments, driven by science and mathematics, can advance and change cultures, but societal and cultural forces can also act to constrain or limit technological development.

Understanding the interrelationships among science, mathematics and

technology (including communication media) as foundations upon which education and the work of educators is based is the central consideration of the Department.

These concerns are structured programmatically in Communications and Education, Computing and Education, and Instructional Technology and Media (for technology), and the College programs in Mathematics and Science Education. The Institute for Learning Technologies is a service and research forum promoting uses of digital communications technologies to advance innovation in education



Darlyne Bailey, Vice President for Academic Affairs and Dean of Teachers College



and society. Another venue, the Center for Technology and School
Change helps schools plan for change brought about by the technology.

THE EDUCATION OF PROFESSIONALS

Department of Organization and Leadership

Beyond the campus, Teachers College is becoming more visible as a principal player in the formation of public policy and the policy discussions that govern the future course of education. We have constituted programs for educational professionals and practitioners and influential members of the public and private sectors to focus on the profound changes that have enveloped our entire educational system.

To achieve that goal, we are bringing together national leaders from busi-

ness, the media, foundations, labor, government, and education to give priority attention to resolve the issues destined to return confidence, credibility, and distinction to environments wherever learning takes place.

In pursuit of that initiative, the Department of Organization and Leadership incorporates such programs as Adult Learning and Leadership, Education Leadership, Higher and Postsecondary Education, Nurse Executive/Health Administration, Politics and Education and Social-Organizational Psychology.

The research and service organizations associated with leadership initiative are the Klingenstein Center for Independent School Education, Institute of Higher Education, Insti"Never before as a teacher have I felt more empowered and connected to the global community as I did when 32 laptops arrived in my classroom.

When used extensively and from a child-centered point of view, technology helps education work as it should. In that sense, teachers, administrators, students, parents and community and corporate partners interact to discuss the future of education and how best to benefit children from technological innovations."

Christine Mulgrave

tute of Research and Service in Nursing Education, and International
Center for Cooperation and Conflict
Resolution.

TEACHERS COLLEGE TODAY

Given the scope and breadth of its offerings and initiatives, Teachers College is more than its name implies. Indeed, we are a premier training ground of teachers and administrators. But our institutional reach extends much further to encompass the education of psychologists, biobehavioral and behavioral scientists, health professionals, policy analysts, technologists, and internationalists.

Teachers College today defines itself as a graduate and professional school of education in the broadest sense of the term—concerned with education across the lifespan both in and out of the classroom. It is an education engaged with society and in support of its culture.

LITERACY FLOURISHES IN FAMILY CENTERED LEARNING

"Literacy flourishes in the home on the strength of a number of factors, in addition to shared book reading, such as: language interaction that includes an expressive vocabulary, the use of words, types of conversation and inquiries about meaning; a learning environment that focuses on an interactive teaching style, family support and encouragement and shared experiences; and warmth and affection in the home around activities that are print-related. Income disparities notwithstanding, family is what matters in advancing literacy."

PIA REBELLO BRITTO, Ph.D., Research Associate Scientist, Center for Children and Families

RESEARCH ON CRITICAL ISSUES

Teachers College students are taught by professors who are outstanding researchers, scholars, and practitioners—most of whom have had professional day-by-day experience in schools or in running school systems, health institutions, psychological clinics, and other services.

Faculty research, mostly conducted in association with students, informs the teaching of our professors. In fact, Teachers College students often are the first to hear about projects that can redirect educational practice and policy. Here are examples of recent faculty research:

OUTSTANDING DISSERTATION ON LITERACY

In her doctoral dissertation in Developmental Psychology, Pia Rebello Britto examined the association between conditions that support literacy in the home and the literary skills expressed by low-income African-American, pre-school and school-aged children. What made for

an atmosphere in the home conducive for literacy, Dr. Britto noted, were "language and verbal interactions, the learning climate and the social-emotional climate."

From that, she found that the language environment in the home represented a major factor in how preschoolers expressed themselves verbally and that school readiness skills were linked to the learning and social-emotional climate in the home. On the strength of this research, Dr. Britto won the 2001 International Reading Association Outstanding Dissertation Award for her study, "Family Literacy Environ-



Henry Levin, Director of the National Center for the Study of Privatization in Education



Pia Rebello Britto, Ph.D., Research Associate Scientist. Center for Children and Families

ment and Young Children's Emerging Literacy Skills."

INFORMING THE PUBLIC ON SCHOOL PRIVATIZATION

In a pair of renewal grants from the Ford Foundation and the Pew Charitable Trust, the National Center for the Study of Privatization in Education is building on its strengths as a resource dedicated to nonpartisan analyses and dissemination of information in the privatization movement in education. The Pew grant of \$500,000 is in support of the Center's plan to study tuition tax credits, home schooling and school contracting. A comparable grant of \$500,000 from Ford is designated to support an innovative approach to

THE RESILIENCY FACTOR IN COPING WITH LOSS

"In a study of bereavement patterns, analyzing data before and after the death of a spouse, a surprising finding emerged. Although many participants exhibit common, time-limited grief reactions, the majority of respondents exhibited little or no distress following the loss. In part, we can attribute those findings to the resiliency many individuals have to assimilate loss so quickly. It seems that resilient individuals are more accepting of death and believe more clearly that the world is just."

GEORGE A. BONANNO, Assistant Professor of Psychology and Education

community engagement and dissemination of information regarding educational privatization.

According to Henry Levin, the William Heard Kilpatrick Professor of Economics and Education and Director of the Center, "the fact that few in the general public or among policymakers know much about educational privatization sets out a major challenge. Public education is being remolded in directions that are little known and understood by those who will be most affected by these changes. This situation violates the premise that an informed citizenry is a necessary condition for an effectively functioning democracy." To better inform the public, the Center plans to establish partnerships with the media, and civic, educational and government organizations that disseminate knowledge.

COPING WITH GRIEF AND TRAUMA

With funding from the National Science Foundation, George Bonanno, Assistant Professor of Psychology and Education, is studying how survivors of the World Trade Center tragedy are faring as a result of their experiences on September 11. Survivors of the terrorist attack, Professor Bonanno acknowledged, are likely candidates for Post-Traumatic Stress Disorder (PTSD) in light of their exposure to grave dangers in fleeing the buildings, the horror of watching people jump from the buildings and others being buried by falling debris.

Based on earlier research that found self-enhancing people better able to cope with extremely adverse conditions, Professor Bonanno is exploring whether such individuals cope better than those without those attributes. The research will look at the social cost of self-enhancement and how it relates to overall adjustment and well-being. Interviews with survivors of the World Trade Center attacks will focus on how they express their emotions when discussing their experiences of September 11. The research is focused on whether selfenhancing individuals process emotions differently that others and, if so, whether those differences hold the



George A. Bonanno, Assistant Professor of Psychology and Education

key to their unusual ability to cope with extreme adversity.

CLEAN PAYS OFF

For five years beginning in 1968, researchers made yearly visits to 3,000 homes and rated their cleanliness on a five-point scale with five considered "very clean" and one considered "dirty." Twenty-five years later, a team of researchers including Teachers College Professor Jeanne Brooks-Gunn assessed the educational attainment and earnings of the young adults who grew up in those homes. After controlling for parental education, income and other factors, the researchers found that young adults who grew up in homes rated clean to very clean completed 13.6

EXPERIENCING THE WORLD THROUGH MUSIC

"Children are inherently musical beings, and through their sensitivity to the musical qualities of sound, they invoke musicality in the adults who interact with them. The rhythms and melodies of our earliest efforts to connect with infants reflect the intuitive nature of musical communication. For young children, music provides a personally rewarding resource, as accessible as the imaginative worlds they construct. We're looking at the ways music serves children emotionally, socially, physically and cognitively in contexts involving families, caregivers, teachers and peers."

LORI CUSTODERO, Assistant Professor of Music Education

years of school compared with 12 years for those whose childhood homes were rated not very clean to dirty. Similarly, wages for those growing up in the cleaner homes averaged \$14.70 an hour compared with \$12.60 an hour for those raised in less clean homes.

In drawing conclusions from the study, Professor Brooks-Gunn, Virginia and Leonard Marx Professor and Professor of Developmental Psychology, noted that beyond school achievement, other factors predicting adult success included social, motivational skills and family-level variables. She added "there is more to the home than just providing stimulating learning experiences. It is not the clean or tidy house per se but...something to do with how ordered or structured you as an adult try to run your life. Our study seems to be related to intergenerational success as well, over and above education."

Music Hath Charms to Communicate

To the delight of children between seven months and two years old, Lori Custodero, Assistant Professor of Music Education, brings a duffel bag filled with music-related playthings into the playroom in the Rita Gold Early Childhood Center at Teachers College. With her students watching the interactions from an observation room out of sight, several children pull egg-shaped maracas out of the bag.

Even though most of them cannot yet talk, the group of seven children requested the song "La Bamba" by selecting the maracas and pointing to the CD player. Shaking them happily to the beat of the music, smiling and having a good time, they are, according to Professor Custodero, "engaged." Although many of the children haven't developed verbal language, they can express their choices for musical activities based on which instruments, books or other objects they pick out of Professor Custodero's bag.



Lori Custodero, Assistant Professor of Music Education

Through the music activities, she noted, she is able to study the children's "flow experience" that keeps them challenged in order to keep learning new skills. Having tracked the musical lives of children at the Center for the last three years, Professor Custodero and her peers continue to teach us about how children think and communicate through music.

THE SELF CONTROL FACTOR IN SMOKING CESSATION

Funded by a \$1 million grant from the National Institutes of Health, Professors Kathleen O'Connell and

SELF CONTROL AS A RESOURCE

"What's new about the concept of self-control is that it is regarded as a resource. When exercised, for example, it can help people stop smoking, remain on a diet or control one's temper. But, self-control can be used up. It is important, then, to replenish one's self control so it is strengthened to continue to serve as a deterrent to unwanted behaviors. There are ways. Sleeping. Relaxing. Avoiding temptations. In addition, the more one exercises self control the better one gets at it."

KATHLEEN O'CONNELL, Isabel Maitland Stewart Professor of Nursing Education

George Bonanno are examining the role of self-control, strength and what Professor Bonanno calls "diminished agency" in resisting temptations to smoke when people are attempting to quit. Diminished agency is a reduced sense that one is in control of one's life, expressed in the language people use to describe their situations.

In approaching the study, Professor O'Connell, the Isabel Maitland Stewart Professor of Nursing Education, hypothesized "that frequent and prolonged temptations to smoke and those accompanied by especially high cravings for a cigarette would deplete selfcontrol resources and lead to lapses. Another is that sleep helps restore self control and thus lapses would be less likely in the first few hours after sleeping. To explore issues of self control, the Teachers College researchers have data generated from earlier studies on smoking cessation. Professor O'Connell believes that research on smoking could be relevant to other conditions that require self-control, from overeating to drug abuse.



Kathleen O'Connell, Isabel Maitland Stewart Professor of Nursing Education

Techniques suggested include staying away from situations that arouse temptations and pursuing positive experiences such as relaxing to help restore self-control. "We hope our research results in reliable methods we can teach people to help them change their behavior and stay healthy," Professor O'Connell concluded.

IMPROVEMENTS IN STUDENT OUTCOMES LINKED TO HIGHER TEACHER PAY

Research on the little explored issue of teacher salaries found that the higher the level of compensation for instructors the better the math scores, the lower the drop-out rates and the lesser the degree of attrition. "This is powerful stuff," said Constance K. Bond, whose dissertation is entitled 'Do Teachers Salaries Matter.' Dr. Bond insisted that "paying teachers more improves student outcomes." Dr. Bond said incremental advances in pay won't do.

"If we really want to make a change," she added, "we are talking about a 40 percent increase in teacher salaries." That would bring teachers on a par with the salaries paid to others with a bachelor's degree. For example, she said teachers earn \$13,000 less than their counterparts with a baccalaureate degree. At the master's level, the gap is \$20,000.

She cited two case studies to prove her point—one in Connecticut and the other in Northern California. "Connecticut," Dr. Bond noted, "is one of the only states that has substantially increased teacher salaries, and they did so in 1988 with the

SCIENCE KNOWLEDGE AS A CHANGE-AGENT

"Contrary to a great myth that science is hard, we believe that an education in its fundamentals would be appealing once we have appropriately staffed and equipped programs in our urban schools. The major reasons why a science education is crucial are twofold: one is it gives young people, particularly those from disadvantaged backgrounds, the opportunity to move into science and science-related career fields; the other is the knowledge it provides families to address medical, environmental and planning and development issues in their neighborhoods to enhance the quality of urban living."

Angela Calabrese Barton, Associate Professor of Science Education

Educational Enhancement Act." As a result, she added, test results, especially student reading test scores, have gone through the roof, despite the fact that the median income in the state fell over the period and the percent of minority groups increased. The New Haven district serves working class communities that had abysmal test scores. By raising teachers salaries in the early 1990s, "student outcomes improved dramatically and now there is a waiting list to get into the district."

Dr. Bond maintained that the federal government has "a large role to play, especially concerning the issue of equality of opportunity. This includes equal access to an excellent education for all American children. Teachers like what they are doing and want to educate children. They just are looking to be paid what other professionals receive. It's not about greed. Money does, however, clearly matter."

Initiatives to Elevate Science Education in Urban Schools

Science education in urban schools that serve poor populations has languished in the face of understaffing, lack of certified science teachers and limited science resources. To reverse that failing, Angela Calabrese Barton, Associate Professor of Science Education, has advanced a broad-based program to initiate and invigorate science education in urban schools. It involves the establishment of an Urban Science Education Center, revisions in master's and doctoral programs, classroom innovations, after school programs, parent participation and science for all initiatives.

According to Professor Calabrese
Barton, "the mission of the Center is
threefold: to rebuild our science programs at TC so that our graduates
become leaders in urban science education; to work closely with schools
in order to collaboratively rethink
what science education might look
like in urban schools; and to use
what we learn in the schools and in



Angela Calabrese-Barton, Associate Professor of Science Education

our teacher education programs to educate those who make policy."

One Center project entitled I USE Science (Improving Urban Schools Through Empowering Science Education) employs teaching and learning teams to provide experienced teachers, pre-service teachers and teacher educators the opportunities to examine, design, implement and evaluate state-of-the art science education practices in their classrooms. A second project, USE-IT (Urban Science Education with Integrated Technologies), offers after-school science programs to children in improverished urban communities.

In a project called Parents in Poverty and Science Education Reform, Professor Calabrese Barton said, "the research focuses on parents in poor neighborhoods and the relationships they establish and the roles they play in elementary schools to implement reform-based education." A fourth program, Science Learning with English Language Learners, works with schools whose students are learning English as a second language to support them in meeting the new goals of "science for all."

HIGHER SALARIES IN HIGH PERFORMANCE WORK SYSTEMS

In a survey of 4,000 employees from 45 firms in the apparel, steel and medical electronic industries, researchers at Teachers College found that those workers were paid higher salaries than others in traditional production systems. Thomas Bailey, Director of Teachers College's Institute on Education and the Economy, concluded that the wage differential was based on "high-performance work systems that give workers the opportunity to use creativity, imagination, and problem-solving abilities, while in traditional systems the use of these characteristics is discouraged or, at best, not expected."

High-performance work systems, according to Dr. Bailey, provides employees with the opportunity to participate in decisions, incentives



Thomas R. Bailey, Professor of Economics and Education

that encourage employee participation, and human resource practices that ensure an appropriately skilled work force. "Organizing the work process so that non-managerial employees have the opportunity to contribute discretionary effort is the central feature of a high-performance work system," Dr. Bailey added.

The researchers, who also included a labor relations specialist from Michigan State University and an economist from Credit Suisse, First Boston, found that workers in more participatory work systems in apparel and steel received more formal and informal training than those in traditional settings. On the other hand, the researchers noted, managers in medical and imaging tended to use workers with a higher level of formal education, especially college graduates. The research is entitled "The Effect of High-Performance Work Practices on Employee Earnings in the Steel, Apparel and Medical Electronics Industries," published in volume 54 of the Industrial and Labor Relations Review.

PREVENTION PROGRAMS A MUST TO CURB OSTEOPOROSIS

An osteoporosis study of 321 women found that 86 percent of the participants had heard of osteoporosis but only three percent reported getting both adequate exercise and the recommended calcium intake to forestall physical infirmities caused by it. The study clearly pointed to the need for osteoporosis prevention programs.

Conducted by John Allegrante, Professor of Health Education, and colleagues at Valdosta State University and the Hospital for Special Surgery, the survey raised these issues: 1)

Fewer than seven percent of young women were getting sufficient exercise and the recommended dietary calcium intake to build health bones.

2) Health providers and educational institutions missed opportunities or failed to disseminate osteoporosis information to young women. 3)

The vast majority of women were able



John Allegrante, Professor of Health Education

to identify the risk factors of lack of exercise and law calcium intake but few were able to identify the risk factors of early menopause, post menopause status or menstrual irregularities. 4) Although concerned about osteoporosis, survey participants believed they were at greater risk for heart disease and breast cancer. 5) Respondents' beliefs about osteoporosis were not related to their exercise habits, calcium intake or knowledge of the infirmity.

Unless a comprehensive educational program is developed, the researchers predicted that "over the next decade osteoporosis will cost two million people years of functional impairment and \$45 billion in direct medical costs."

A MAJOR EDUCATIONAL INFLUENCE

Each of these research findings—along with other investigative projects conducted at Teachers College—has had or is destined to have a major influence on educational practice and policy. Most of the ongoing research at Teachers College involves not only professors but also students who learn under the mentorship of experienced and nationally renowned investigators how to explore and examine data, analyze and interpret findings, and present the material in a coherent and comprehensible fashion.

PREPARING THE NEXT GENERATION OF LEADERS

Down through the decades of its more than 100-year history, Teachers College has both anticipated and acted on critical developments that paved the way for progress in all of education. This ability to foresee societal needs has led to fields of study that now are considered standard parts of education school fields of study. Educational administration. Early childhood education. Special education. Education of the gifted. Educational psychology. Sociology and education.

And, as new issues emerge, many of them deep-seated and difficult, Teachers College remains in the vanguard with creative ideas and solid information to address contemporary concerns. Nutrition education. Science education. Reform of educational systems. Urban education policy. Crosscultural education.

It is against this background of enterprise that students at Teachers College develop the capacity for leadership in pursuing educational interests that parallel the real and abiding concerns of the society at large. And, in the course of their studies, students have the opportunity not only to absorb the elements of leadership but to engage in the exercise of leadership.

Here are a number of programs that

serve to prepare the next generation of leaders:

A MENTOR ON THE INTERNET

Latasha Greer, an Ed.M. candidate in Politics and Education, is one of 400 volunteers who exchange e-mail with New York high school students through an Internet forum call iMentor. Greer and the Brooklyn senior she mentors from Sheepshead Bay High School exchange e-mail messages several times a week on topics such as career goals and college applications.



Latasha Greer, an Ed.M. candidate in Politics and Education

Greer, a full-time graduate student, works part-time at the Center for Arts Education and the Laurie Tisch Sussman Foundation and is a student teacher at the Frederick Douglass Academy. With a busy and unpredictable schedule, Greer noted that "iMentor was perfect because it matched my interests and accommodated my schedule." She advises her high school students on college essays as well as personal matters. Why does she do it? "On a personal level it

TEACHER PREPARATION FOR INTEGRATED CURRICULUM

"Restructured or alternative schools in New York City generally provide a caring culture that helps motivate urban, diverse youngsters to learn. The young and inexperienced teachers who staff most restructured schools are often unprepared to plan and implement humanities—an integration of social studies and English language arts—that is at the heart of restructured school programs. A new orientation in teacher education is needed that focuses on planning integrated curriculum, attention to the special demands of both social studies and English subject matters as well as their connections, and methods of instruction and assessment suitable for interdisciplinary settings."

MARGARET CROCCO AND STEPHEN J. THORNTON, Associate Professors of Social Studies and Education

takes me out of my own environment. It makes me take off my graduate school blinders. By connecting with a high-schooler, I feel grounded," she explained.

THE ROLE OF SOCIAL STUDIES IN UNDERSTANDING SEPTEMBER 11

In the aftermath of the September 11 terrorist attacks, the nation has undergone a change of profound proportions in how it accommodates the sometimes contradictory poles of security and freedom. Most significantly, the lessons of that cataclysmic event have taken hold in many of our nation's schools.

Commenting on the classroom priorities on the Middle East, its traditions and cultures, Stephen J. Thornton,
Associate Professor of Social Studies and Education, said teachers will likely pay more attention to the role of religions in world history and to civil liberties and national security issues in civics or American history. Social studies have often been criticized,
Professor Thornton said, for not having a lasting effect on students. Crit-



Stephen J. Thornton and Margaret Crocco, Associate Professors of Social Studies and Education

ics argue that it doesn't improve voter turnout or create understanding of how government works. "But the way social studies teachers are addressing the issue of September 11 will have a long term effect," he said.

In a complementary study, Professor
Thornton and Margaret Crocco, Associate Professor of Social Studies and
Education, found that the impact of
school restructuring on social studies in
New York City schools can deviate
greatly or little from social studies
practices in traditional schools. On the
one hand, the researchers found a preponderance of young, inexperienced
teachers in small classes doing
"humanities" in a block scheduling
structure use student-centered learning

activities, spend little time in direct instruction and assess student learning through portfolios. By contrast, in other small schools, older, more experienced teachers rely on the standard NYC/NYS survey course framework, teach social studies via the developmental lesson and emphasize breadth over depth. Professors Thornton and Crocco said the caring atmosphere found in restructured schools should be complemented by extensive teacher education in methods of interdisciplinary teaching, curriculum development, guidance as well as portfolio and other forms of authentic assessment.

Accelerated Schools Project

The Accelerated Schools Project is a comprehensive approach to school reform based on the idea that at-risk students thrive in an atmosphere of rigorous standards, exciting curriculum and high expectations. For example, student performance at P.S. 108, an East Harlem elementary school where the project has been in place for more than five years, improved dramatically over that period, moving

from twentieth to third out of 22 schools in the district. The school, with a predominantly Hispanic population and bilingual classes, sufficiently influenced New Jersey representatives from School 27 in Paterson and Red Bank Upper Elementary Middle School in Red Bank to incorporate the project in their institutions. Referring to her visit, Mary Kildow, a School 27 supervisor noted that "in the classrooms I have seen at School 108, the children are enthusiastic. They take responsibility for their own learning."

POSTDOCTORAL INQUIRIES ON COMMUNAL LEARNING AND MATHEMATICS

Two minority postdoctoral fellows, one with a Ph.D. in Psychology and the other in Mathematics, are embarking on follow-up research stemming from their dissertation subjects.



Eric A. Hurley

Eric A. Hurley focused his Ph.D. in Developmental Psychology from Howard University on learning contexts that reflect different cultural modes—the individual, competitive mode of mainstream culture and the communal learning mode of most black children. He plans to take that research further to determine what specific behaviors take place in communal learning that lead to black children's greater success.

In his graduate research, Eric Hurley focused on the three realms of cultural experience and found that black children predictably performed best in a communal learning context, one that stressed cooperation and shared responsibility while the white children did better and preferred the competitive and individual learning contexts. Along with looking at the behavior factors that characterize communal learning, Dr. Hurley is exploring a cultural variable referred to as "verve," relating to the level and variety of environmental stimulation that black children seem to prefer. His dissertation research won Dr. Hurley the American Psychological Association's Jeffrey S. Tanaka Memorial Dissertation Award for Excellence in Graduate Research in 2001.

Erica Walker, whose background is in mathematics and whose Ph.D. is from the Harvard University Graduate
School of Education, examined who among high school students continue to take advanced mathematics classes and why and when those who discontinue in math are likely to stop. As part of her fellowship, she wants to learn why black boys leave the



Erica Walker

advanced math pipeline by the end of the ninth grade and why black girls are as likely as white students to remain in the advanced math pipeline.

As part of her fellowship, Dr. Walker plans to publish a series of articles from her dissertation and to augment her findings by doing research in New York City schools. She wants to try to get at the root of what is happening with black boys in math as well as the gender differences between African-American boys and girls. Her research received an American Educational Research Association Dissertation Grant in 2000.

INDIGENOUS HEALING AND TECHNOLOGY AS DIVERSITY TOOLS

With President Arthur Levine's 1999 call for an institution "in which there is no 'us and them'" as background, each semester Teachers College provides a \$3,500 stipend and six tuition credits for two Diversity Fellows.

In a recent selection, Anvita Madan-Bahel, a doctoral student in Counseling Psychology, was named by

GIVING VOICE TO INDIGENOUS HEALERS

"Larger and larger numbers of peoples from different cultures are coming to New York City and the United States. That kind of diversity often poses problems of adjustment, principally in mental health areas, when immigrant groups are uncomfortable with the conventional talk therapy approach of mental health service providers. To overcome this clash of cultures, we are providing our students with indigenous healing methods to establish a collaborative bridge in working with indigenous healers in immigrant communities."

CHRISTINE YEH, Assistant Professor of Psychology and Education

Professor Christine Yeh, and Jessica Hochman, a doctoral candidate in Philosophy and Education, was chosen by Professor John Broughton.

Madan-Bahel, an international student from Delhi, India, is interested in developing indigenous healing techniques to counsel ethnic minorities, principally South Asians, as part of the course on "Perspectives in Cross-Cultural Counseling" taught by Professor Yeh. Indigenous healing, according to Professor Yeh, has to address concerns in way consistent with a client's culture. For many cultures, conventional talk therapy, Professor Yeh added, "can be very embarrassing or very shameful…"

What is required is an alternative way of dealing with stress, and that



John Broughton, Professor of Psychology and Education, and doctoral candidate Jessica Hochman



Doctoral candidate Anvita Madan-Bahel, and Christine Yeh, Assistant Professor of Psychology and Education

approach to healing is what Madan-Bahel and Professor Yeh want to incorporate in training about indigenous healing.

Although she has a background in philosophy and gender studies, Hochman is a long-time devotee of the educational applications of computer technologies. In furtherance of that interest, she has interned with HarlemLive, an extracurricular online publication produced by teens in Harlem and with Playing2Win, a community technology center in Harlem. With her fellowship, Hochman plans "to help faculty integrate high technology with the themes of youth cultures and the roles of gender and ethnicity."

STUDENT TEACHING AND INTERNSHIPS

Preservice students are required to spend one or two terms engaged as student teachers in selected elementary schools, junior and senior high schools, and in special education settings as an integral part of their degree requirements. Other practica and internship opportunities are available. For example, as interns, students can be employed as assistant teachers in day-care centers, nursery schools, elementary schools, or middle schools. Students who are experienced teachers can be employed to assist departmental faculty in supervising and coordinating student teaching placements and internships. Departments that offer doctoral degrees can place candidates in internships in colleges and universities, including junior and community colleges at research facilities, in public and independent schools and in other settings. This range of experiences, a connecting link between theory and practice, provides a foundation in education that serves as a stepping stone to leadership.

A RANGE OF SCHOLARSHIP SUPPORT

Scholarship support is often pivotal in enabling students to undertake and complete their graduate education at Teachers College. Among the scholarships that help in that process are the John Dewey Scholarships and the Dr. Ben Wood gifts for research and fellowships.

Each fall, members of the Dewey Circle Network who have provided \$1,000 or more to the Annual Fund for scholarship support are invited to a thank-you event. Most recently, 41 new members of the Network were presented with the John Dewey Medal for this gift support. On behalf of the Dewey Scholars, Ben Adams, a Ph.D. candidate in Clinical Psychology, said "one of the biggest risks I took when deciding to come to Teachers College was a financial one. You can probably imagine how grateful I felt when I was awarded a partial tuition scholarship that helped me pay for two classes each year."

Trustee Elliot Jaffe, who served for three years as chair of the National Campaign Committee, was presented with the John Dewey Leadership Award for his support of the Peace Corps Fellows Program before federal money was available and for his continued support of minority students who are committed to

teaching in the New York City public schools.

The late Ben D. Wood, a Professor of Collegiate Educational Research at Columbia University, was an early pioneer in learning technologies and a key figure in the proliferation of standardized educational tests.

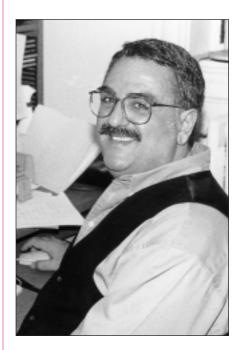
Together with his wife Grace, Dr. Wood established the Elbenwood Fund for Educational Research, the Ben D. Wood Fellowship Fund and the Institute for Learning Technologies Fund. Each year the Ben D. Wood Fellowship Fund provides a three-year full-tuition scholarship to a new doctoral student studying technology and education. A total of 12 students have been supported to date, with the thirteenth fellow currently working toward a degree in Technology in Education.

The Elbenwood Fund was given to establish the Elbenwood Center for the Study of the Family as Educator, covering operating costs for research, current activities, fellowships for graduate students and a faculty position, the Elbenwood Chair in Education that underwrites support for the Center's director. Professor Hope Jensen Leitchter has held the Chair since establishment of the endowment.

The gift to the Institute for Learning Technologies Fund helps the College provide much needed operating support for the Institute to continue its research and outreach activities in local Harlem schools.

ISSUES OF THINKING AND DOING IN TEST TAKING

James E. Purpura, Assistant Professor of Language and Education, has received the International Language Testing Association Award for the "Best Paper Published in Language Testing" entitled "An Analysis of the Relationships Between Test Takers' Cognitive and Metacognitive Strategy Use and Second Language Test Performance." In developing his paper, Professor Purpura surveyed 1,660 high school students in 17 centers all over Turkey, the Czech Republic and Spain, analyzing "the relationships between how people said they did and how they actually performed. I used a



James E. Purpura, Assistant Professor of Language and Education

Insights in Covering Education Issues

"The Hechinger Institute, as its main activity, offers seminars for working journalists to help them deepen their knowledge and understanding of education issues. These are times when education has risen to the top of the nation's political agenda. Journalists involved in the coverage of schools and colleges must be able to cope with complex topics that are often fraught with controversy. Journalists frequently have to carry out this demanding work under deadline pressures. Thus, in an academic setting—absent the daily grind—journalists who attend Hechinger seminars are able to take a refreshing and intellectually rewarding break during which they can reflect on their past work and plan for the future."

GENE 1. MAEROFF Director, The Hechinger Institute on Education and the Media

statistical technique—structural equation modeling—that allowed me to look at a number of variables and their effect on performance.

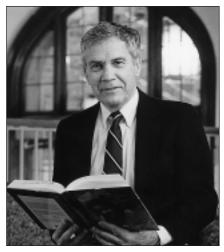
"Everybody uses metacognitive strategies, meaning everybody thinks. The problem is when people think and don't do or when people do and don't think. Or, when people think and do but they are thinking and doing the wrong things. All of this is logical but I've shown it by looking at these different relationships." In applying his research findings, Professor Purpura said he is "interested in the patterns of behavior of large numbers of people. For example, in a school, if you see test scores are poor maybe it's because the strategies used in these tests were not the most effective. I believe you can actually train students to be more strategic in the way they approach a test."

EDUCATION FOR CURRENT LEADERS/DEVELOPMENT OF EDUCATIONAL DISCOURSE

Dialogue. Interaction. Outreach. Innovation. Teachers College engages in the full array of techniques to promote and provoke a spirited exchange of points of view to improve, inform, and reform the state of education.

THE PROMISE OF SCHOOL-COLLEGE COOPERATION

The Learning Connection, edited by Gene I. Maeroff, Director of the Hechinger Institute on Education and the Media, together with two colleagues, chronicled the status of collaborative projects between schools and colleges. Since the publication of his book Schools and Colleges in 1982, Maeroff said there has been a "spotty history" of cooperation. "What has changed over the 18 years is that there are many, many more projects than there were at the beginning of the period," he noted. "What has



Gene I. Maeroff, Director, Hechinger Institute on Education and the Media

changed far less is the impetus and formal support of doing this."

In an introduction to the *Learning Connection*, the editors maintain "there is in most places a profound disjuncture and continuing cultural, political and institutional chasm between K-12 and higher education. The two sectors—at a time when both need reform, renewal, rethinking, and restructuring—have few connecting mechanisms to enable them to work together cooperatively on issues of mutual concern." The

THE ONLY WAY IS EDUCATION

"Teachers College has a long history in international education and outreach. In the early 20th Century, we were instrumental in the formation of the Chinese education system. In the l950s and 1960s, we initiated educational projects in East Africa and Afghanistan. Now, with porous national and international borders, education remains the best approach to counter mistaken and uninformed premises about other cultures that often lead to violence and terrorism. Education represents the slowest means to achieve positive change but for certain it is the only way."

BARRY ROSEN, Executive Director of External Affairs

issues include: governance, equity, standards, teachers and community building.

The dozen case studies in the book were written by a wide group of journalists working with the Hechinger Institute and supported through a grant from the Ewing and Marion Kauffman Foundation.

Answer Terrorists with Economic Development and Cultural Repair

Addressing a Teachers College Forum, Barry Rosen, Executive Director of External Affairs and one of 52 Americans held hostage in Iran from 1979 to 1981, told an audience of tri-state superintendents that a lasting solution to the crisis of terrorism requires an arduous two-pronged strategy of economic development and cultural repair. The Forum, held twice each semester, provides an opportunity for tri-state superintendents to discuss current educational issues with one another, members of the Teachers College faculty and distinguished guests.

In his remarks on "Autocracy, Democracy and the Islamic Idiom," Rosen compared the hostage crisis and the World Trade and Pentagon carnage as "two calamitous incidents 20 years apart, both hinging to some degree on currents in Islamic politics." He cited the need to democratize the current autocratic Muslim regimes in the Middle East "to break out of the cycle we are in today that produces much of the silent—and not so silent—approval of bin Laden. In my view, this is the number one issue in any truly serious war against terrorism, even though the effects can only be long term. However, I detect no willingness anywhere in Washington to bite this hardest of bullets."

For starters, however, he said "out of both compassion and self interest, the developed countries must take steps to assist the Islamic world in ways that go beyond window dressing. The United States and the European Community should lift barriers to the industrial and agricultural



Barry Rosen, Executive Director of External Affairs

products of the Islamic countries, especially the poorest. Equally important, the developed world must lend a helping hand to the secular education systems of the Middle East and South Asia.

"Within the Islamic world itself,"
Rosen continued, "governments and civil organizations can join the struggle through a dual program of their own. Making a renewed and credible commitment to poverty reduction, they must also be willing to counter the nonsensical and destructive elements of Islamist discourse."

CHINA AND TEACHERS COLLEGE IN CONTACT

With a concentrated agenda to facilitate contacts between Teachers College and China, the Center on Chinese Education held seminars, hosted visiting professors and sponsored visiting scholars to China.

Inaugural Seminar

The inaugural seminar featured Halsey Beemer, Lead General Educator at the World Bank, who focused on China's attempt to reduce poverty and geographic disparity through educational investment.

Visiting Scholars

Teachers College hosted two rounds of Chinese visiting scholars. The initial group included: Professor Xiaowei Wang, a science educator from Central China Normal University who did a comparative analysis of science education in China and the United States; Professor Wenli Li, a specialist in educational policy from Peking University, who conducted a critical review of school finance reform in four states in the U.S.; and an expert in the history of education from Central China Normal, Professor Hongyu Zhou, who examined the history of the relationship between Teachers College and modern Chinese education.

The second group included Professor Yanqing Ding, who specialized in education economics from

Peking University, Professor Xian-Ming Xiang, who is a specialist in comparative higher education from Beijing Normal University, Professor Lihoa Shang, an expert in school financing from Zhejiang University, and Professor Peiya Gu, who specializes in the teaching of English at Suzhou University.



Mun C. Tsang, Professor of Economics and Education

Visiting Lecture on Higher Education Reform in China

In an address on higher education reform in China, Weifang Min, Executive Vice President and Dean of the Graduate School of Education at Peking University, noted that as China shifts from a planned to a dynamic market economy, its higher education system is being organized to better prepare its people for the labor market. As the economic sector took the lead in reform, he added, dramatic changes have taken place in the human resource sector, which is closely tied to the higher education system. Dean Min observed that although the new

institutions need to gear their programs toward the labor market, all teaching and research should not be shaped by market force. It does mean, he said, "human resource needs of the socioeconomic development as signaled by labor market supply and demand will be of primary importance to universities."

TEACH-IN AT TEACHERS COLLEGE

Against a backdrop of the September 11 terrorist attacks, Teachers College sponsored a "Teach-In for Teaching and Learning in a new Global Environment" for more than 500 tri-state educators, parents and graduate students to help respond to the questions and concerns raised from the catastrophic events of that day.

Organized around 50 workshops and a closing panel discussion, the Teach-In focused on such issues as coping mechanisms for children, the bravery of teachers, criminalization of terrorism, media coverage, civil liberties in a time of conflict and community solidarity.

Carol Bellamy, Executive Director of the United Nations Children's Fund, said September 11 prompted "two huge and complex educational problems. First, how to help children and young people cope with the personal effects that the terrorist attacks created, and second, how to think about war and political violence in an informed and open-minded way."



Carol Bellamy, Executive Director of the United Nations Children's Fund

New York City Public Schools
Chancellor Harold Levy recounted
examples of how many teachers rose
above routines that day, shepherding
students to safety. Five students
from a Chinatown middle school
told of harrowing scenes of death
they witnessed and the loss of jobs
in their families. Anne Nelson,
Director of the International Program at Columbia's Graduate School

of Journalism, maintained that "we have to be extra conscious about how America looks at double standards because when the world looks at us, that is what they see."

Gary Sick, who was a member of President Carter's National Security Council, described the al-Qaeda terrorist network as a group that feeds off states where the central government is in disarray. In a discussion of the impact of 9/11 on the media, Lanning Taliaferro, assistant Metro Editor at the *Journal News* in Westchester, said terrorism has displaced education as the number one domestic issue.

In a session on civil liberties, Ira Glasser, former Executive Director of the American Civil Liberties Union, spoke of the repeated passage and revocation of laws that were not used against anyone committing a real crime, but targeted people who were unpopular in an effort to make citizens feel safe. Without real evidence,

> he said, "you violate the rights of innocent people and you don't make anyone safer."

Maxine Greene, the William F. Russell Professor Emeritus of Philosophy and Educaton, questioned "how does one reconcile my hatred of war and my delight that the Taliban are out of business?" Focusing on human rights, she said they represent "people coming together in community and coming to agreement with one another and making a pact with one another," an approach she can be nurtured in the classroom.

LECTURE SERIES ON CRITICAL ISSUES IN EDUCATION

The on-going dialogue at Teachers College is enlivened by a regular series of campus lectures, most recently featuring Vera John-Steiner, the Presidential Professor of Linguistics and Education at the University of New Mexico, who discussed the fruits of creative collaboration on ideas; Larry Cuban, Professor Emeritus of Education at Stanford University, who concentrated on issues connected to 'good schools,' and Marian Wright-Edelman, who focused on support for the well-being of children.

The Sussman Lecture

Vera John-Steiner, Teachers College's

Sussman Visiting Professor, is the author of Creative Collaboration, a book that maintains that many of the best ideas in science, art and writing evolve more so from collaborative interaction than from strictly individual expression. Her thesis was the subject of the Sussman Lecture where



Ira Glasser, former Executive Director of the American Civil Liberties Union, and Maxine Greene, the William F. Russell Professor Emeritus of Philosophy and Education



Vera John-Steiner, Sussman Visiting Professor

Professor John-Steiner held forth on the creative vitality that emerges from collaborative partnerships.

"In partnerships," she said, "we see each other and ourselves through the eyes of the other. Through their support, we explore new parts of our selves. Together we create our futures." Professor John-Steiner cited a number of examples that she maintained proved the efficacy of the world of ideas. Quoting Jean Paul Sartre on his complex relationship with Simone de Beauvoir, "we feed each other, provide each other the gift of confidence." Einstein, Professor John-Steiner noted, had 100 collaborators and it was conversations he had with Neils Bohr that led to the construction of contemporary physics. Picasso and Braque collaborated for seven years on Cubism, she added.

Professor John-Steiner explained that collaboration does not require people actually sitting together. But before one can change knowledge, she said, one has to acquire knowledge.

"Changing the existing tenets of what we have been taught is too great to accomplish alone," but she added, "in order to collaborate you have to have a strong ego, a flexible ego, an ability to negotiate and recognize when someone has better ideas than you do."

The Sachs Lectures

In a series of three Sachs Lectures, Larry Cuban, Professor Emeritus of Education at Stanford University, concentrated on the question of "Why it is so hard to get good schools?" "All three lectures," he said, "are built around the notion of good schools and why we have good schools—and the different kinds of good schools."

His first lecture, "Why Have American Schools Become an Arm of the Economy," dealt with how the business community, twice in this past century, created one version of a good school that basically undermines all the different kinds of good schools. At the turn of the last century and then in the past quarter century, Professor Cuban said, "business-led coalitions have basically converted public education into an arm of the economy.

"Because of fears of foreign competition, public schools have basically taken on the singular goal of preparing students for the marketplace." This, he argued, "has created a certain orthodoxy about what constitutes a good school in America. I also argue that we're living in the middle of one of these orthodoxies right now." Since the late 1970s, he said a second kind of business-led coalition has emerged, demanding that our schools have high academic standards—holding teachers, principals and superintendents more accountable.



Larry Cuban, Professor Emeritus of Education at Stanford University

In his second lecture, Professor
Cuban argued "that reducing the notion of a 'good school' and 'good' teaching to an age-graded school with a uniform curriculum, one brand of instruction, and one kind of testing—the current official ideology—undermines public education in a democracy. It does so because the present orthodoxy ignores the many different kinds of 'good' schools and teaching in the past century that

have responded to the multiple and competing purposes of tax-supported public schools and the diversity of students in their motivation, backgrounds and academic talents."

There are two familiar realities that too often get neglected, he said. "First, the competing and historic purposes for public schools challenge the certainty that business leaders, U.S. Presidents, state governors, school boards, and pollsters express today when they describe the 'good' school Second, students thrive in very different types of schools."

In the last 25 years, Professor Cuban said, business-led coalitions have triumphed extraordinarily in spreading an official orthodoxy of what constitutes a 'good' school for the 21st century. However, he cautioned, "we have to recover from the past and expand the historical variety of goodness in schools. In this democracy there is no one best way to think, nor to worship one's God, to live a life, and no one way to school a child. The quest for scientific efficiency, or one best system, is a fool's errand when it comes to choosing one's religious faith, one's philosophy of life, or one's school."

In his third lecture, Professor Cuban said the fundamental purpose of tax-supported schooling in the United States is to produce literate, self-reliant, socially responsible graduates

who display democratic behaviors and attitudes. In defining democratic attitudes and behaviors, he listed participation in and willingness to serve local and national communities; open-mindedness to different opinions and a willingness to listen to such opinions; respect for values that differ from one's own; treating individuals decently and fairly, regardless of background, and a commitment to reason through problems and struggle toward openly-arrived at compromises. "What matters in judging whether schools are 'good,' then, is not whether they are progressive, community-based, or traditional, but whether they are discharging their primary duty to provide a common education in helping students think and act democratically," he maintained.

The Virginia and Leonard Marx Lecturer

Marian Wright Edelman, founder and president of the Children's



Marian Wright Edelman, founder and president of the Children's Defense Fund

Defense Fund, called for a change for the better for the 12 million hungry children in the United States, some of whom are homeless and some of whom are being abused. As the Virginia and Leonard Marx lecturer, Ms. Edelman recalled the President's promise to leave no child behind. "We will work with him and other leaders to transform those words in reality."

One approach, she noted, is a comprehensive act called The Movement to Leave No Child Behind, proposed by the Children's Defense Fund, a range of child advocacy networks and members of Congress. According to Ms. Edelman, provisions of the act ensure that every child and his or her parents have comprehensive health insurance. It covers expansion of food programs to end hunger, specifies that every child should be able to read by the fourth grade and can graduate from school able to succeed at work and in life, asks for decent affordable housing to give children a place called home, and, above all, seeks to protect all children from neglect, abuse and violence.

"The bill is comprehensive because children don't come in pieces," she said, adding, "they live in families and communities who need to be able to support them." She proposed a major and ongoing lobbying and media campaign to draw attention to the act and influence the thinking of Congress to take serious steps to enact it.



BOOKTALK LECTURES

BookTalk, lectures about influential books on education, most recently featured the work of Diane Ravitch who discussed her recent book, *Left Back: A Century of Battles Over School Reform,* in a forum at Teachers College. Ravitch, who is one of the nation's foremost historians of education and a leading education policy analyst, contended that "like John Dewey said, we should educate all children the way we would educate our own."

The progressive movement, championed by John Dewey, stimulated schools to broaden their curricula, making education more relevant to the needs and interests of students. "Ultimately, my vision is in line with Dewey's," Ravitch said. "It's dangerous to have a citizenry that doesn't understand science, literature, history or other aesthetic treasures." Teachers, she added, need to be well educated, not just well trained.

Ravitch, a former Adjunct Professor of History and Education at Teachers College, is a Research Professor at New York University and a Non-Resident Senior Fellow at the Brookings Institution. From 1991 to 1993, she served as Assistant Secretary of Education and Counselor to the Secretary of Education.

Earlier, the BookTalk series featured such authors as Christoph Wolff, the William Powell Mason Professor of Music at Harvard University who spoke about his book, *Johann Sebastian Bach—The Learned Musician*. He was followed by Frances O'Connell Rust who discussed her latest book, *Guiding School Change: The Role and Work of Change Agents*.

ETHNICITY AND DISABILITY

Two recent conferences at Teachers College explored issues of race, gender, social class and disabilities with participation by experts and scholars in those fields.

The Winter Roundtable on Cross-Cultural Psychology focused on "Dealing with Gender and Social Class in Cross-Cultural Psychology and Education." Under the direction of Robert T. Carter, Professor of Psychology and Education, the two-day event featured presentations on such issues as oral history, male identity, Asian-American stereotypes and Latinas in higher education. Joseph Everett Trimble, a distinguished social psychologist whose scholarly emphasis is understanding Native American people, received the Janet E. Helms Award for Mentoring and Scholarship in Psychology and Education. His accompanying lecture was titled "Restoring Our Connections: Ethnocultural Influences on Spirituality, Identity and the Human Condition."

Under the direction of Professor
Linda Hickson, the Center for Outcomes and Opportunities for People
with Disabilities held its annual twoday conference on "When Worlds
Collide." The most recent conference
looked at "Promises and Realities,"
focusing on such topics as how sex
offenders with mental disabilities
should be treated, how teachers cope
with children who are mentally fragile and conductive education as a
possible pedagogy that can assist
disabled people to learn.

CONDITIONS FOR TEACHERS AND CHILDREN TO GROW

"My colleagues and I in the Reading and Writing Project believe passionately that, if we, as teachers, are going to create conditions which help children outgrow themselves as readers, writers and learners, those same conditions need to exist for us as teachers. The Project gives us the study groups, think-tanks, writing workshops and research labs that help us to hold onto our dreams for what schools can be."

LUCY McCormick Calkins,

Director, Reading and Writing Project and Professor of English Education

IMPROVEMENT OF PRACTICE

Teachers College faculty members and students do not spend all of their time within the confines of College buildings. They are in the schools, colleges, businesses, psychological centers and community centers of New York City and the nation—advising on ways to turn new ideas of scholarship into better methods of practice. The changing of practice has been a hallmark of the College since its founding, when a few people saw the need to prepare a new kind of teacher for the immigrant children who were then arriving in New York City.

Today, much of the College's outreach work is initiated by its many centers and institutes. Here are a few examples:

THE IMPORTANCE OF BOOKS IN THE CLASSROOMS

Small libraries are to be located in each of the city's 21,000 elementary and middle schools with funding provided by private grants and a \$31.5 million commitment from New York City. The initiative origi-

nated with the Teachers College Reading and Writing Project under a grant from Alan Levenstein and became a city priority in Mayor Giuliani's final state-of-the city address.

Discussing the private-public partnership, Professor Lucy Calkins, who heads the Reading and Writing Project, said it was vitally important to get books into classrooms. "Because in overcrowded city classrooms where kids have lots of needs-whether smaller classes or teachers who need more professional development putting books in their hands can make a difference," she said, adding: "Books don't require new buildings to be built. Books don't require incredible professional development. Throughout history, we have heard about people who have become educated by reading books. Books can open worlds to people. In most of the classrooms I work in there is a crisis—there are no books. If there are books, they are often inappropriately chosen books for the readers who are there."



Lucy McCormick Calkins, Professor of English Education

Before receiving the city commitment, Professor Calkins and Mr. Levenstein, recognized that his grant, even though substantial, wouldn't come close to covering books for very classroom. "So," Professor Calkins said, "we decided to re-imagine his grant to go towards a process that might make it more possible for philanthropic people like Alan to adopt schools and create state-of-theart libraries in those schools."

Working with 150 teachers, the Reading and Writing Project analyzed the needs of classrooms in New York City to find out what books tend to be there, which aren't there

NEW POSSIBILITIES WITH DIGITAL TECHNOLOGIES

"As educators experience changes in the communications constraints, they understand that digital technologies open the existing educational system to new possibilities. Educators are determining what emerges through the social construction of digital learning communities. Educational structures from kindergarten through graduate schools and adult education are wrenching open to change; but the course that change can and should take must be determined through the interplay of effort by many different groups."

ROBERT O. McCLINTOCK, John L. and Sue Ann Weinberg Chair in Historical and Philosophical Foundations of Education

as yet, as well as search for the best books they could find. Small task forces had been working on the project for almost two years when the city commitment, made at the request of Schools Chancellor Harold O. Levy, expanded it to establish classroom libraries in every elementary and middle school in the city. "I think a good thing has been done," Professor Calkins concluded. "The Mayor and the Chancellor deserve applause."

THE INSTITUTE FOR LEARNING TECHNOLOGIES (ILT)

Directed by Robert O. McClintock,
ILT draws together researchers not only
from Teachers College but also from
the Columbia University community
as a whole to study ways in which
technology can be used to improve
education. ILT is committed to
expanding the scope of educational
attainment by making extensive
resources readily available to institutions ranging from pre-kindergarten
through higher education. One recent
ILT project has allowed elementary
school students in Harlem to link up



Robert O. McClintock, John L. and Sue Ann Weinberg Chair in Historical and Philosophical Foundations of Education

technologically with "friends" at other schools around the nation to share ideas about school projects and other areas of interest. One boy in Harlem, for example, co-authored a report with another boy about their mutual hero, John Paul Jones, even though the other boy was in Ohio.

THE NEW TEACHER INSTITUTE

There is a 50 percent likelihood that teachers in urban schools will drop out in their first few years of teaching. To address this rate of attrition, Teachers College created the New Teacher Institute to support teachers during vulnerable periods when they are more likely to leave urban schools.

"The next few years present us with an auspicious 'teaching moment' for schools and teachers," said Katherine A. Unger, Director of the Institute. "This is an unprecedented opportunity to roll up our sleeves and help build teacher quality and capacity for the 21st century."

With three-year foundation funding of \$1.345 million, the Institute provides a yearlong residency program for participants, wherein they engage in regular sessions in their districts as well as in a virtual community. In addition to attending seminars onsite, new teachers work with district-employed school-based mentors on a day-to-day basis.

"We are convinced that after a year of residency at this Institute, new teachers will be better prepared to cope with the arduous yet rewarding task of educating those who need the best education," said Peter W. Cookson, President of the Doris Dillon Center. The Center, which distributes professional development programs for educators is collaborating with

the Institute, housed in Teachers College's Center for Educational Outreach and Innovation.

In its first year, according to Institute Director Unger, "we experienced a 90 percent retention rate of teachers who successfully completed the Institute and returned to teaching their second year. The urgency to build a new cadre of teachers in urban schools stems from the fact that in New York City alone, 54,000 of the total of 78,000 teachers will be retiring over the next four and half years. This, said Unger, translates into a national need for more than 2 million new teachers to join the profession over the next eight years.

SHARING BEST PRACTICES

The Heritage School received two grants, one from the Robin Hood Foundation to support academic and counseling programs and the other from the Horace W. Goldsmith Foundation for general support and to help other educators adopt the best practices of the school.

Heritage, a Teachers College laboratory public high school in East Harlem, also received a Ventures in Leadership grant from the Wallace-Reader's Digest Funds to help the school share its best practices through brochures, book chapters, a conference and ongoing visits and discussions.



Peter Dillon, Assistant Principal, and Susan Bartolone, Principal, Heritage School

The Robin Hood grant supports both Heritage's academic summer program and half the salary of a new college counselor position. Once the school raises the funds to support the other salary half, the Foundation will make its grant. Since almost all Heritage students are the first to go on to college, there is a need to provide counseling and support in the college selection and application process.

The Goldsmith grant is for general support of Heritage as well as funding to help other New York City school teachers and principals incorporate Heritage educational initiatives and innovations in their schools' curricula.

Ventures in Leadership is part of LEADERS Count, a national initiative by the Wallace-Reader's Digest Fund to place quality leadership at the core of school reform and build a new field of knowledge that helps disseminate a broad range of improvements.

BENEFITS OF SCHOOL-TO-WORK PROGRAMS

In a report analyzing a wealth of studies on the effectiveness of schoolto-work initiatives, the Institute on Education and the Economy found that partnerships between education and business produced beneficial results for student participants. The report, "School-to-Work: Making a Difference in Education," noted that the program contributes significantly to students' career preparation through exploration activities and work-based experiences that teach skills that are useful in careers and help students think about and plan for the future, including college.

Participation in the program helped bring about a reduction in the dropout rate and an increase in college enrollment. "We are very encouraged by all the positive results we found in our comprehensive look at the research, said Katherine Hughes, Senior Research Associate at the Institute. "Business and education partnerships really show promise in giving students opportunities that many wouldn't otherwise have, and in motivating them to learn."



The report countered the fears of critics concerned that the program would weaken academic achievement and divert students to low-skilled jobs. In fact, there is no evidence to support this position.

THE LINK BETWEEN THEORY AND PRACTICE

Whether analyzing the special needs of adolescent girls, enriching the educational lives of disadvantaged but gifted children, or helping to replicate programs that best prepare high school students for the world of work, Teachers College institutes and centers are changing practice and policy on a local, state and national level. Faculty members and researchers are devoted to the idea that our research is not meant to be read only by a small audience of other researchers but by the

wider audience of teachers, administrators and other professionals who will put the results of the research into practice.

The link between theory and practice at Teachers College is also enhanced by the fact that so many of our students work—either as interns or as full-time professionals—in schools, clinics, and other organizations around New York City during the day, while taking their classes at Teachers College in the late afternoons and evenings. These students bring practice into the classroom, discussing with their professors the challenges they have faced on the job and keeping the classroom interchange grounded in the reality of practice.

TEACHERS COLLEGE AND NEW YORK CITY

The multicultural, urban environment that is New York City informs almost everything that Teachers College does. Teacher education students do practicums in the New York City public schools. Researchers are involved in projects in more than 200 of those schools. Social and organizational psychology students work as interns in businesses from Wall Street to Midtown. Counseling psychology students work in counseling centers and schools across the urban landscape. Arts education students are interns at museums, galleries and arts organizations.

The linkages between Teachers College and New York public schools provide yet other opportunities for students to have an impact on the educational destinies of youngsters.

Under the Neff Tutorial Program, established by James Neff, a retired bank official, three Teachers College students named Neff Fellows are working with elementary school pupils to improve their reading skills. The Neff Fellows, Carolyn Choi, Amy Wolf and Barbara Iverson, master's degree candidates in the Reading Specialist Program, see groups of two to three children in the second and third grades for four 45-minute sessions per week. "What strikes me," Carolyn Choi said,



Neff Fellow Carolyn Choi works with students at PS 6.

reflecting the sentiments of all three, "is the individual time that I've been able to devote to children at risk."

Angela Alexander, a candidate for a master's degree in science education, is also volunteering at a homeless shelter teaching science to children in After-School Science Time. A graduate of the University of Pennsylvania with a double major in biology and African-American studies, Angela moved from medicine into teaching after being appalled by the sorry state of high school education she experienced as a volunteer in Philadelphia. That transformation brought her to Teachers College where she is "developing into a well-

rounded educator, one who will not conform to the traditional didactic teaching methods, but effectively prepare students for the new millennium by enriching their critical thinking skills."

Beyond their practical experiences,
Teachers College students can also take
advantage of courses offered at one of
the world's most prestigious universities by signing up for courses in other
divisions of Columbia University.
They can also take courses at other
institutions in the area, including
Union Theological Seminary and Jewish Theological Seminary.

New York City also offers a wealth of informal educational opportunities.

Students can take advantage of the theaters, museums, concerts, lectures and discussion groups. The College is located in Morningside Heights, a section of Manhattan that has a long tradition of intellectual excellence. The neighborhood is also one of the safest in New York City, and the streets are usually filled with residents and tourists, browsing through the bookstores and visiting historic and architectural wonders such as the Cathedral of St. John the Divine, Riverside Church and Grant's Tomb.

No Ivory Towers

What makes Teachers College different from other graduate schools? Its location in the heart of the major urban center in America and its close contact with the institutions of New York City give the College vibrancy. The wide-ranging expertise of the College's faculty offers students a plethora of philosophies from which each student can form a personal point-of-view. And, especially, the interplay between theory and practice, between the world of the mind and the world of real work with real people, children, adolescents and adults, makes Teachers College the one-of-akind institution that it is. And each graduate of Teachers College becomes a one-of-a-kind leader—the kind of leader institutions of our nation and our world need today.





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AUTUMN TERM 2002 (September 4 - December 20)

Calendar Notes:

- Autumn Semester Only: Saturday courses meeting weekly are scheduled for only 14 weeks in the regular Autumn semster. Any full-semester Saturday course must take into account one less class period and add time to regular meetings accordingly.
- Dates for move in/out of residence halls are tentative and subject to change.

September 2002

- Sunday. Beginning of occupancy in Teachers College residence halls for new students attending the Autumn Term.
- 2 Monday. Labor Day. University Holiday.
- 3 Tuesday. In-person registration for Autumn Term. Hours: 10 a.m. to 8 p.m. Orientation Program, Horace Mann auditorium 8:30 a.m. to 5:00 p.m. New international students report to 163 TR.
- 3 Tuesday. Last day to file, in the Registrar's Office, Master's essays for October 16 degree award.
- 4 Wednesday. Classes begin. Autumn Term 2002
- 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 and/or their representatives available from 3 to 5 p.m.
 - 6 Friday. Last day to file notification in Office of Doctoral Studies of intention to defend Ed.D. and Ph.D. dissertations during the Autumn Term 2002.
 - 6 Friday. Last day to file application for Doctoral Certification Examination (Ed.D./Ph.D.) to be given October 18 and October 25.
- 17 Tuesday. Last day to add and drop courses for the Autumn 2002 term, file a Certificate of Equivalency, and enroll in Student Health Service and Student Medical Insurance programs.
- 18 Wednesday. Requests for late registration under exceptional circumstances on or after this date require Registrar's approval and payment of \$100 late registration fee.
- 30 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 16 award of degree.

October 2002

- 1 Tuesday. Last day to change points in *variable point* courses.
- 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 award of the October degree.
- 16 Wednesday. Award of October degrees and certificates. No ceremony.
- 17 Thursday. Midterm date, Autumn Term 2002
- 18 Friday. Doctoral Certification Examination (Ed.D./Ph.D.) for students not majoring in an area of psychology, 9 a.m. to 12 noon and 1:45 to 4:45 p.m.
- 25 Friday. Doctoral Certification Examination (Ed.D./Ph.D.) for students majoring in an area of psychology, 9 a.m. to 12 noon and 1:45 to 4:45 p.m.
- 31 Thursday. 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 14 upon payment of \$15 late fee.)

November

- 27 Wednesday. No Classes. Offices open.
- 28-29 Thursday Friday. Thanksgiving Holidays.

December 2002

- 2 Monday. Last day to file, in Registrar's Office, Master's degree essays for February degree award.
- 9 Monday. Registration for the Spring term for continuing students via web and touch-tone registration begins.
- 20 Friday. Autumn Term 2002 ends.
- 21 Saturday. Termination of occupancy in Teachers College residence halls for Autumn Term students not returning for Spring Term 2003.

SPRING TERM 2003 (January 22-May 13)

January 2003

- 19 Sunday. Beginning of occupancy in the Teachers College residence halls for the Spring Term.
- 20 Monday. Martin Luther King, Jr. Day Observed. University Holiday.
- 21 Tuesday. In-person Registration for Spring Term 2003. Hours: 10:00 a.m. to 8:00 p.m. New international students report to 163 TR.
- 22 Wednesday. Classes begin. Spring Term 2003
- 22-24 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.
 - 24 Friday. Last day to file notification in Office of Doctoral Studies of intention to defend Ph.D. and Ed.D. dissertation during Spring Term 2003.
 - 24 Friday. Last day to file application for Doctoral Certification Examination (Ed.D./Ph.D.) to be given February 14 and February 21.
 - Friday. 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 14 upon payment of \$15 late fee.)
 - 31 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 12 award of degree.

February 2003

- 4 Tuesday. Last day to add and drop courses for Spring Term 2003, file a Certificate of Equivalency, and enroll in Student Health Service and Student Medical Insurance plans.
- 5 Wednesday. Requests for late registration under exceptional circumstances on or after this date require registrar's approval and payment of \$100 late registration fee.
- 7 Friday. Last day to deposit Ph.D. dissertation with the Office of Doctoral Studies and the Graduate School of Arts and Sciences for the award of the February degree.
- 12 Wednesday. Award of February degrees and certificates. No ceremony.

- 14 Friday. Doctoral Certification Examination (Ed.D./Ph.D.) for students not majoring in an area of psychology, 9 a.m. to 12 noon and 1:45 to 4:45 p.m.
- 14 Friday. Last day to file notification in Office of Doctoral Studies of date and time of final Ph.D. Oral Defense to be held in Spring Term 2003.
- 18 Tuesday. Last day to change points in *variable-point* courses.
- 21 Friday. Doctoral Certification Examination (Ed.D./Ph.D.) for students majoring in an area of pscyhology, 9 a.m. to 12 noon and 1:45 to 4:45 p.m.

March 2003

- 3 Monday. Last day to file Master's essays for May degrees.
- 13 Thursday. Midterm date, Spring Term 2003.
- 16-23 Sunday-Sunday. Spring Holidays.

April 2003

- 21 Monday. Registration for the Summer Term for continuing students via web and touchtone registration begins.
- 29 Tuesday. 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 21 award of degree.

May 2003

- 13 Tuesday. End of Spring Term 2003.
- 14 Wednesday. Termination of occupancy in Teachers College residence halls for Spring Term 2003 for students not remaining for Summer Session A. Extensions granted for students remaining for Commencement.
- 16 Friday. Last day to deposit Ph.D. dissertation with the Office of Doctoral Studies and the Graduate School of Arts and Sciences for the award of the May degree.
- 20 Tuesday. Teachers College Master's degrees Convocation, 4:00 p.m.
- 21 Wednesday. Conferring of degrees, 10:30 a.m.; Teachers College Doctoral degrees Convocation, 2:30 p.m.
- 22 Thursday. Termination of occupancy in Teachers College residence halls for Spring Term2003 for students not remaining for Summer Session A and who are participating in Commencement.



TEACHING AND STUDIO PRESENCE IN THE ARTS

"A critical component of the Arts program at Teachers College is preparation of students for teaching positions in the public and private schools and higher education institutions, supervisory posts in the arts, museum administration and gallery management. We match this aspect of our program by a strong studio presence in art, music and dance with exhibitions of paintings, recitals and concerts."

JUDITH M. BURTON, Professor of Art Educaton

RESEARCH AND SERVICE ACTIVITIES

Organized research and service activities at Teachers College, in addition to being carried on by individual professors, are conducted through special projects and major institutes. Students, in limited number, serve in these institutes and projects as assistants, sometimes with academic credit, thus extending their professional experience while at the College.

The Center for Adult Education is interested in research on adult and organizational learning; and on transformative learning for adults in a variety of settings. The Center has conducted awardwinning research on literacy and has pioneered an innovative Action Research Professional Development program (ARPD) for literacy teachers through reflective practice and experimentation in the classroom. The Center has also conducted many formative evaluation studies of adult education initiatives using Perspective Discrepancy Assessment.

For further information contact Professor Victoria Marsick, Teachers College, Columbia University, 525 W. 120th St., Box 112, New York, NY 10027; telephone (212) 678-3754.

The Center for Arts Education

Research consists of an interdisciplinary arts group which engages in basic and applied research in the arts and human development, art education and the arts

in education. The Center calls upon expertise from professionals in the arts: visual, music, dance, theater and media and also from philosophy, cognitive and developmental psychology, curriculum, education and technology. A mix of focuses characterize the Center's work. Studies explore the role of the arts in diverse educational settings from the vantage point of school reform, curriculum development, arts integration and assessment. Of particular interest is the role of the arts as they interweave in urban culture and education. Other studies deal directly with aspects of artisticaesthetic thinking, perception and action both within and across the diverse domains of the arts.

For more information, contact co-directors Professors Hal Abeles and Judith Burton, Teachers College, Columbia University, Box 78, 525 West 120th St., New York, NY 10027; telephone (212) 678-3288.

The Center for Children and Families.

directed by Virginia and Leonard Marx Professors Sharon Lynn Kagan and Jeanne Brooks-Gunn, advances the policy, education, and development of children and their families. The Center produces and applies interdisciplinary research to improve practice and to raise public awareness of social issues that affect the well-being of America's children and families. This work is accomplished through cutting-edge research and analyses; the systematic training of future



Judith M. Burton, Professor of Art Education

leaders, scholars, and policy scientists; and dissemination of information to the media, policy makers, and practitioners on the front lines.

Research

The Center brings together leading scholars from psychology, education, health, family studies, psychiatry, sociology, economics, and political science in the interdisciplinary analyses of complex social phenomena. This work is focused in five domains: Early Care and Education; Families; School Transitions and Readiness; Systems/Governance; and Neighborhood/Community. Research ranges from empirical studies to evaluation of intervention and prevention programs to analytic investigation of major issues that affect children and families.

DISCOVERING PREVENTION AND INTERVENTION STRATEGIES

"The center is focused on finding proactive ways to support research with direct applications to the lives of people with disabilities. Our interest is in discovering prevention and intervention strategies that can prevent the adverse effects of poverty and disability and improve the academic, personal, and social outcomes of education programs. Center activities are aimed at increasing opportunities for individuals with disabilities to be self-determined, fully included members of society. These efforts include studies designed to increase academic and social resilience and to decrease vulnerability to abuse in high-risk adolescents and adults."

LINDA HICKSON, Professor of Education and Director, Center for Opportunities and Outcomes for People with Disabilities

Training and Fellowship Opportunities Individuals currently engaged in graduate work at Teachers College and Columbia University are eligible for formal affiliation with the Center. Students with policy research interests in children and families may be considered for Graduate Fellowships. Training activities include the formal enrollment in degreeseeking programs and the coursework attendant to degree candidacy. Research scientists are an integral part of the Center, managing specific projects, training master's- and doctoral-level students, and writing policy reports. Also part of the life of the Center are Research Affiliates, junior faculty from Columbia University and across the nation who desire specific training and mentoring in child and family policy. Additional training opportunities are available to graduate students through internships and practica.

Policy, Legislative and Dissemination Opportunities

The Center's faculty and fellows are engaged in numerous policy, legislative, and dissemination activities. The Center sponsors quarterly policy seminars and a Policy/Leadership Institute for non-matriculating students and practitioners. Also offered are Putting Children First, a summer fellowship that places advanced doctoral students in NYC agencies, non-profit organizations, and foundations to learn how policy is implemented, as well as the Federal Policy Institute, a multi-disciplinary Washington-based effort, in

conjunction with the Center for Educational Outreach and Innovation, that provides hands-on policy experiences for 40 Teachers College students annually. In addition, the Center collaborates with leading national policy-related groups in key efforts, including the systematic dissemination of research to legislators through the National Conference of State Legislatures and work with the National Governors Association and Education Commission of the States.

With its array of policy briefs, publications, and resource guides, the Center reaches a wide audience, including the media, decision makers and practitioners. Through testimony to policy makers from the legislative and executive branches of government, active engagement with national research and professional organizations and editorial policy boards, and participation in national study panels, the Center is constantly extending its reach to improve practice and raise public awareness of social issues that affect the well-being of young children and families.

For more information, contact Professor Jeanne Brooks-Gunn, Teachers College, Columbia University, Box 39, 525 West 120th St., New York, NY 10027, (212) 678-3904, jb224@columbia.edu, or Professor Sharon Lynn Kagan, Teachers College, Columbia University, Box 226, 525 West 120th St., New York, NY 10027, (212) 678-8255, sharon.kagan@columbia.edu.



Linda Hickson, Professor of Education

The Center for Opportunities and Outcomes for People with Disabilities

(formerly the Research and Demonstration Center for Handicapped Children) confronts the challenges facing special education today and broadens the scope of research at Teachers College. The Center is committed to producing knowledge and professional expertise that will enhance the quality of life for people with disabilities.

The Center for Opportunities and Outcomes for People with Disabilities is committed to supporting research, evaluation, and demonstration efforts aimed at increasing opportunities for individuals with special needs to become fully-included members of society. Three broad priorities are reflected in the themes of the Center:

COLLABORATION A KEY INFLUENCE

"Group dynamics play a dominant role in almost every aspect of our daily lives—in families, learning environments, institutions and organizations, and society as a whole. Whatever the venue, collaboration is a key influence in achieving sound objectives from relationships in the community, the workplace, the classroom, or the household. With an understanding of both small and large group dynamics, as well as such concepts as boundaries, authority, role, and task, that collaboration can take the form of shared visions, agreement on plans of responsibility, and participation in action steps. Having a stake in the process can yield good results in the outcome."

Debra A. Noumair, Associate Professor of Psychology and Education

Empowerment. Research and demonstration efforts to enhance capacity and opportunities for independence and self-determination.

Prevention. Research and demonstration efforts to prevent negative outcomes often associated with disability, including reducing vulnerability to victimization and abuse.

Diversity. Research and demonstration efforts to address disability-related issues of culturally and ethnically diverse groups, including women and minorities.

For information, contact Professor Linda Hickson, The Center for Opportunities and Outcomes for People with Disabilities, Teachers College, Columbia University, Box 223, 525 W. 120th St. New York, NY 10027.

The Center on Chinese Education is

aimed at contributing to a better understanding of education in China and to educational exchange between the United States and China. It seeks to achieve this mission through three categories of activities: research and development, education and training, as well as outreach and exchange. These activities draw upon the historically special relationship between Chinese Education and Teachers College, the interests and expertise of the faculty at Teachers College, as well as expertise and resources outside of Teachers College. The Director of the Center is Dr. Mun C. Tsang, Professor of Education at Teachers

College. Major funding for the Center's activities is provided by the Henry Luce Foundation and the Ford Foundation. The Center's Website is located at www.tc.columbia.edu/centers/coce.

The Center for Health Promotion, which was established in 1981, has comprised diverse working groups of faculty and students interested in stimulating research and development efforts responsive to national priorities in health promotion and disease prevention. Historically, the work of participating faculty and students has spanned both basic and applied research and development, and has included projects focusing on the influences of personal behavior on health status, as well as how educational and behavioral intervention can be used to improve health and prevent premature death and disability throughout the human life span through schools, patient care, workplace, and other communitybased settings.

Faculty of the center have been instrumental in organizing and supporting the development of multidisciplinary teams capable of competing for external grant support to address complex research questions. These teams have collaborated on consortium projects with physicians and with behavioral scientists, biostatisticians, epidemiologists, economists, and other experts, and often involve graduate students from the programs in the health studies cluster of the Department of Health and Behavior Studies.



Debra A. Noumair, Associate Professor of Psychology and Education

Extensive collaborative research activities have been undertaken during the last two decades with faculty from the various schools of the Columbia University Faculty of Medicine, including the School of Nursing, College of Physicians and Surgeons, and the Joseph A. Mailman School of Public Health; Weill Medical College and Graduate School of Medical Sciences of Cornell University; and the Albert Einstein College of Medicine. Center projects and investigators have been funded by grants from several of the National Institutes of Health and numerous private foundations, including the Arthritis Foundation, Cancer Research Foundation of America, W. K. Kellogg Foundation, Metropolitan Life Foundation, and the Pew Memorial Trusts.

In addition to publication in scientific journals, faculty of the Center have also contributed to the science base underlying professional practice and policy development in health promotion and disease prevention by providing consultation and technical assistance to private and voluntary health organizations, such as the National Center for Health Education; and governmental agencies such as the National Institutes of Health and Centers for Disease Control and Prevention. Faculty have also consulted on various international efforts, including the Vietnam Rehabilitation Project, a multinational effort of Health Volunteers Overseas and the U.S. Agency for International Development to assist in the development of new curricula for professional preparation in medicine, nursing, and public health; the Verona Initiative, a multi-sector European partnership for health development organized by the World Health Organization European Regional Office; the Salzburg Seminar Special Session on Critical Issues in Global Health: Leadership Challenges in the 21st Century; and the National Health Education Advocacy Summit.

For further information, contact Professor John P. Allegrante, Director, Center for Health Promotion, Teachers College, Columbia University, Box 114, 525 W. 120th St., New York, NY 10027.

The Center for Social Imagination, the Arts, and Imagination

Imagination must be released in all dimensions of education . . . Maxine Greene

Founded and directed by Teachers College Emeritus Professor of Philosophy and Education Maxine Greene, the Center for Social Imagination, the Arts, and Education is committed to the development of alternative modes of inventing, creating, and interpreting. Through these endeavors of the imagination, and through its series of interdisciplinary programs, the Center seeks to shape visions of "a lovelier world," embracing, in all its diverse

cultural richness, one humanity. Working in the tradition of Dewey, James, and the Existentialists, the Center brings schoolchildren, artists, academics, and social activists together in conferences and workshops to explore possibilities of reform and transformation in schools and social communities. By sponsoring monthly "salons," the Center attempts to generate dialogue and research projects that open new perspectives in the arts, humanities, and the human sciences. The Center is also in the process of developing networks that bring together art institutions, public schools, and Teachers College in order to investigate, document, and articulate just what role encounters with the arts-including the quintessential 20th century art forms of film and video—might play in inspiring social visions and, by consequence, in effectuating vibrant, moral communities. The Center, in its desire "to enlarge the conversation, to try for clarity, to persuade," will, in addition, publish occasional essays, in both belles letters and position paper formats, reflecting imaginative thinking and advocacy in these areas of concern. The Center for Social Imagination, the Arts, and Education is

affiliated with the Teachers College Center for Educational Outreach and Innovation. It is funded by the Aaron Diamond Foundation, the Solidago Foundation, and an anonymous donor. For more information, write to Dr. Maxine Greene, Teachers College, Columbia University, Box 132, 525 West 120th Street, New York, NY 10027.

The Center for Technology and School **Change** helps schools integrate technology into their curricula and daily lives, by planning with schools for the use of technology, educating teachers how to use it, planning curriculum projects that include technology, helping teachers to implement projects, and assessing the effect of technology on schools. The Center is based on the idea that technology will have a large impact on the structure of schooling, as it has in the past, and that schools must plan for the kinds of change they want it to have. We believe that technology should be integrated with curriculum in ways that emphasize active student learning, collaboration, interdisciplinary learning and problemsolving in areas that are meaningful to schools, and conducts site-based research. For more information, contact Dr.





Howard Budin, Director, Center for Technology and School Change, Teachers College, Columbia University, Box 8, 525 W. 120th St., New York, NY 10027; telephone: (212) 678-3773; Web site: www.tc.columbia.edu/~academic/ctsc.

The Community College Research Center (CCRC) was created in 1996 with support from the Alfred P. Sloan Foundation, and is housed at the Institute on Education and the Economy (IEE). Since its inception, the CCRC has taken a broad and comprehensive view of the community college, seeking out the most important issues confronting these institutions.

Since community colleges are vital to the aspirations of people and their communities, it is imperative that they become part of the mainstream research agenda. "When we speak of the transition from school to work, we will be speaking more often of the community college," says Professor Thomas R. Bailey, an economist in the Department of International and Transcultural Studies, who is also Director of the Center. "When we speak of retraining our nation's labor force, we will also be speaking more often of the community college." The mission of the Community College Research Center is to carry out and promote research on major issues affecting the development, growth and changing roles of community colleges in the United States. In addition to carrying out our own research, the CCRC strives to strengthen the research capacity both within the colleges and the broader community, attract new scholars to the field, promote discussion and debate about crucial and often controversial issues, and disseminate existing research.

Currently, the CCRC's research is focused on the following: the mission of the community college; alternative pathways for students through postsecondary education; the roles colleges are playing in workforce development;

connections between the high school and community college; the rise of new competitors; distance education; alternative skill certifications and skill standards; increasing state and federal demands for accountability and assessment; the rising demand for remediation; and the changing nature of guidance and counseling.

Several Teachers College faculty and faculty from other schools at Columbia as well as other universities and research organizations also work with CCRC. In addition, the Center draws on expertise from a national advisory board of community college practitioners, policymakers, and research scholars. CCRC sponsors an ongoing seminar series, where community college practitioners and presidents, and academic and institutional researchers gather to exchange ideas, present research findings, and explore new areas of study. The Center also provides opportunities for doctoral students who are interested in writing dissertations on community college issues. Reports of research findings, occasional papers, and non-technical briefs are available through the CCRC Web site, or for a nominal cost.

For further information, please contact the CCRC at Teachers College, Columbia University, Box 174, 525 West 120th St., New York, NY 10027 or at ccrc@columbia.edu; telephone: (212) 678-3091; fax: (212) 678-3699; www.tc.columbia.edu/ccrc.

The Doris Dillon Center and TC Innova-

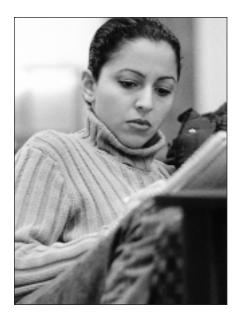
tions. The Doris Dillon Center is a non-profit educational research and development laboratory established in Teachers College in 2001. TC Innovations distributes the programs of the Doris Dillon Center to school districts and other educators throughout the United States and the world. For more information, call Peter Cookson at 212-404-7821, ext.102

The Elbenwood Center for the Study of the Family as Educator pursues various lines of systematic research and inquiry that bring the behavioral sciences to bear in illuminating the educational functions of the family and the relationships between the family and other educative institutions: schools, health and social service agencies, religious institutions, museums, libraries, the media. The Center's activities include research, conferences, symposia, seminars, and workshops.

Current and recent topics considered at the Elbenwood Center include: social networks and educative styles of teenagers, the mediation of television by the family and television in cross-cultural perspective, family contexts of literacy, families and museums, family memories, multigenerational education, grandparents as educators, immigration, migration and family education.

Faculty and students who participate in the Center come from various departments at Teachers College and elsewhere in Columbia University. The Center also maintains liaisons with other institutions through its projects and visiting scholars. Opportunities for pre-doctoral and postdoctoral research are available. An initial statement of the research agenda of the Elbenwood Center is set forth in the following volumes: The Family as Educator. Hope Jensen Leichter, (Ed.). New York: Teachers College Press, 1974. Families and Communities as Educators. Hope Jensen Leichter, (Ed.). New York: Teachers College Press, 1979.

Address inquiries to: Hope Jensen Leichter, Elbenwood Professor and Director, Elbenwood Center for the Study of the Family as Educator, Teachers College, Columbia University, Box 123, 525 W. 120th St., New York, NY 10027; telephone: (212) 678-3187.



The Hechinger Institute on Education and the Media operates on four levels helping journalists who cover education do a better job, helping editors and supervisors carry out their jobs, helping educators and journalists better understand each other, and helping the general public understand the issues involving the coverage of education. The Institute carries out its mandate primarily through seminars that it holds for journalists at Teachers College and at locales around the country. Presenters include educators, policy makers, public officials, and journalists from throughout the country. The Institute is named in memory of Fred M. Hechinger, who was an education editor of The New York Times and a trustee of Teachers College. The founding director of the Institute is Gene I. Maeroff, a former national education correspondent of The New York Times and an author whose books have been published by Teachers College Press and other publishers.

Further information is available from the Hechinger Institute on Education and the Media, Teachers College, Columbia University, Box 127, 525 W. 120th St., New York, NY 10027. Phone: (212) 678-4197.

The Hollingworth Center, a program within the Department of Curriculum and Teaching at Teachers College, Columbia University, is a service, research, and demonstration site. Designed to provide internship and training opportunities for the graduate students at Teachers College, the Center develops model programs in early childhood education, and offers enriching educational services for children and educators in the neighboring communities. Primarily concerned with nurturing the development of young children, the Center was established by Professors James Borland and Heidi Hayes Jacobs in 1981. Over the past 20 years, the Center has been recognized internationally for its exemplary educational programs, grant projects, teacher development efforts, and research contributions.

Opportunities For Graduate Students The Hollingworth Center is an integral component of the Department of Curriculum and Teaching and the Education of the Gifted program. The Center works collaboratively with numerous graduate students and provides them with experiences that enhance their academic programs. These opportunities, made available to students across the College, are extensive and include internships, teaching, research, observations, seminars, assessment, and curriculum design. Each of the positions within the Center provides a salary or stipend and many also offer tuition exemption. The Center awards annual travel grants to graduate students who are presenting their work at professional conferences such as NAGC, NAEYC, or AERA.

Service And Demonstration Programs
The service and demonstration programs of the Center include the July Science
Program, Math and Science Enrichment
Classes, Project APEX, Community Staff
Development Outreach, and the Booktalk Group. Each of these programs provides opportunities that nurture the talent development of the participants. The children served by the Center are from

diverse backgrounds, some of whom are supported through scholarships.

The model programs of the Center offer pre-service and in-service educators the opportunity to design and field test innovative curricula and instructional strategies. These results are then disseminate to a broad range of schools and informal educational institutions. The Center hosts a number of visitors on an ongoing basis and the work of the Center is presented at national and international conferences annually.

International Collaborations

The Hollingworth Center maintains an ongoing relationship with talent development projects in Brazil and Pakistan.

Research

The primary research mission of the Center focuses on the talent development of young children from diverse backgrounds. The Center has contributed to the body of research concerning the identification and education of young, potentially gifted children from economically disadvantaged families. The Center's Director was the co-recipient of two Papers of Year awards from the national Association for Gifted Children for two journal articles related to this topic. Other projects of the Center include developing community in the classroom, differentiated curriculum design, and the scientific thinking of young children.

The J.M. Huber Institute for Learning in Organizations conducts research on learning and change in organizations. The Institute works through partnerships with organizations, including businesses, not-for-profits, and government agencies. The Institute assists organizations that want to improve their ability to use learning strategically to address business and organizational challenges. Partner organizations and researchers associated with the Institute create and share learning tools, strategies, and results as they work together to solve problems. Groups of organizations working together on common problems study their solutions

and interventions in order to improve knowledge about their effectiveness. For information, contact either of the Institute's Co-Directors, Dr. Martha A. Gephart or Victoria J. Marsick, at the J.M. Huber Institute for Learning in Organizations, Teachers College, Columbia University, Box 187, 525 West 120th Street, New York, NY 10027.

The Institute for Learning Technologies (ILT) uses digital communications technologies to advance innovation in education and society. Rapid change in information technology is reconfiguring social, cultural and intellectual possibilities. University research, K–12 and post-secondary education, the arts, community and political activities, and social exchange are all in transition. ILT is a major element of Columbia University's effort to shape these transitions—transitions that are central to the University's mission and practice.

ILT takes education in its broadest sense as its primary area of work. In practice, it promotes an intellectually rigorous progressive education accessible to all. To renew progressivism, educators must pose powerful generative questions in cooperative settings; and limitations on the intellectual resources available to students; enable teachers and students to communicate beyond the classroom; and provide advanced tools of analysis, synthesis and simulation. Increasing the interaction of pre-college and higher education is important. The new technologies provide effective support for such novel interactions. The education of the 21st century will feature extensive collaboration among scholars, teachers, university students, librarians, museum professionals, community organizers, parents, and children of all ages, and these relationships may span great distances and bridge significant cultural divides.

ILT pursues an integrated program of design, development, implementation, and evaluation.

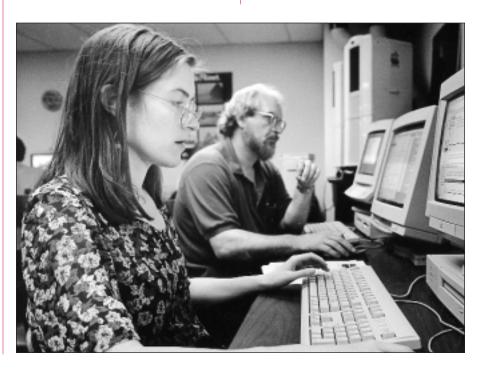
- School-based projects aim to alter the classroom through infrastructure planning and installation, content and curriculum creation, professional development, technical support, and evaluation.
- Professional development includes workshops on the use of generic and project-specific technologies, seminars on curriculum design and development, and consultations by content experts and instructional technologists.
- Content projects develop multimedia to support innovation in education, delivering high-quality intellectual resources and learning tools to students.
- Evaluation projects document the impact of programs and the principles of good design, working with groups in the commercial, governmental, non-profit, and educational sectors.
- Consulting services provide design, development, and strategic analysis for organizations conducting innovative educational projects.
- An internship program provides individuals with experience in school-based projects, professional development workshops, evaluation and policy studies, and content creation.

Technology does not drive educational change, but it conditions educational possibility. Rooted in traditions of liberal education, ILT acts on the technological context to renew established educational traditions.

For more information visit www.ilt.columbia.edu, email info@ilt.columbia.edu, or telephone Professor Robert McClintock at (212) 678-3375.

The Institute for Urban and Minority Education (IUME), since its beginnings at Teachers College in 1973, has been committed to better understanding and influencing the educational, psychological, and social development of urban and minority group students and the schools that serve them.

Historically, the work has been organized by the themes of (1) education as an anti-poverty strategy as a means for upward social and economic opportunity and mobility, (2) equality of educational opportunity and strategies for achieving educational equity, (3) the achievement of multicultural competence in the context of concern for diversity and pluralism, and (4) the reform of schools serving ethnic minority and urban populations. Since the year 2000, IUME





Mun C. Tsang, Professor of Economics and Education, leading a discussion on international and transcultural studies.

has added a concern for the challenge of uncoupling academic achievement from the social divisions into which students fall, i.e., class, ethnicity, first language, and gender.

The Institute approaches the problem of improving the quality of urban education and minority education in three ways: (1) by conceptualizing fundamental problems and formulating systematic programs of research to produce new knowledge and improved solutions, (2) by translating and disseminating this knowledge and applying it in practical situations through its ERIC center, courses of instruction and conferences, and (3) by developing new programs, techniques, instruments, and materials that can be disseminated in a variety of educational settings. This is now being accomplished through programs of research, professional development, technical assistance, knowledge dissemination, public awareness, and community and youth services. Because the work of the Institute tends to fall in "Pasteur's Quadrant" (empirical investigation of practical problems, informed by theory that is grounded in multiple disciplines) it always has had a staff drawn from

many disciplines, who take activist roles in solving the problems of urban and minority education.

For further information, address specific inquiries to the IUME Director, Box 75, Teachers College, Columbia University, New York, NY 10027; telephone: (212) 678-3780.

The Institute for Higher Education promotes and supports scholarly activity on the range of purposes, practices, policies, problems, and perspectives framing the higher education enterprise now, in the past, and potentially in the future. The Institute views postsecondary teaching, learning, and scholarly and creative endeavor in social, political, economic, and historic perspective, and promotes efforts to strengthen and enrich these "core" activities for all participants in the higher education enterprise. As such, it supports explorations of the organization and functions of the higher education enterprise, the larger social, political, and economic environments in which the enterprise evolves and to which it provides returns, and its internal educational and knowledge-based activity, as well as relationships among these.

Director: Anna Neumann, Prof. of Higher Education, Box 101, Teachers College, Columbia University, New York, NY 10027

The Institute of International Studies

was created in 1964 to strengthen the research arm of the College's international enterprise. With the initial aid of a major grant from the Ford Foundation, the Institute began its work with a focus on theoretical and practical studies of the role of education in the modernization of traditional societies. For over a decade, the Institute sponsored and supervised substantial research on Africa, Asia, Latin America, and the industrial nations as well as on a variety of cross-cultural and comparative studies. The Institute helps to formulate and coordinate the College's international effort, to serve as both catalyst and repository for grants and gifts in aid of international studies at the College, to strengthen instructional programs with comparative and international thrusts, and to upgrade the quality of research on international or crossnational themes.

The Institute of Research and Service in Nursing Education (IRSNE), carries

on a program of research and coursework on questions in the education of nurse professors, deans, chief executive officers, and developers of human resources. Institute members examine theory-based questions within nursing's history, provide consultant services to professionals involved in nursing research, and disseminate research findings through reports, conferences, publications, and continuing education. The Institute is the academic home of the Program for Nurse Executives, offering the M.A. and Ed.D. accelerated programs on Fridays.

For further information, address inquiries to the Director, Professor Elaine L. Rigolosi, Box 167, Teachers College, Columbia University, New York, NY 10027; telephone: (212) 678-4004.

The Institute on Education and the **Economy (IEE),** established in 1986 by the Board of Trustees of Teachers College, is an interdisciplinary policy research center that focuses its attention on the interaction between education and the economy. The Institute is dedicated to carrying out research that will help improve educational policy and practice at the local, state, and national levels and to developing an active research community of TC students and faculty interested in these topics. IEE's research agenda includes issues such as the changes in the nature, organization, and skill requirements of work; education reforms designed to address the changing needs of the workplace; the educational value of work; learning on the job; the school-towork model; the design and effectiveness of work-based learning, employer participation in education; academic and industry-based skill standards; and related education reforms.

IEE is directed by Professor Thomas Bailey, an economist in the Department of

International and Transcultural Studies. The Institute's permanent staff includes sociologists, economists, and psychologists. Several Teachers College faculty and faculty from other schools at Columbia as well as other universities and research organizations also work with the Institute. IEE also offers many opportunities for graduate students to work on research projects under the guidance of faculty and senior researchers. Recent activities have included the development of joint faculty-student study groups on work-based learning and on community colleges.

Staff at the Institute have been influential in the development and implementation of the School to Work Opportunities Act of 1994 and the Educate America, Goals 2000 Act of 1994. Reports of research findings, working papers, and non-technical briefs are available through the IEE Web site, or for a nominal cost. The Institute also houses the Community College Research Center (see the description of the Community College Research Center).

For further information, please contact IEE at, Teachers College, Columbia University, Box 174, 525 West 120th St., New York, NY 10027 or at *iee@columbia.edu*; telephone: (212) 678-3091; fax: (212) 678-3699; www.tc.columbia.edu/iee.

The Institute on Education and Government believes that the education of our youth and life-long learning opportunities for all citizens is our nation's most important challenge, and we believe governors play the critical role in meeting this challenge. Our mission is to provide powerful and effective support to governors and other leaders committed to education. We develop ideas for education innovations and research combined with implementation strategies. Our non-partisan Institute concentrates its efforts with individuals and groups that have the compassion, courage, and determination to create initiatives that fulfill this

Peter Coleman, Assistant Professor of Psychology and Education, in a seminar session on conflict resolution.



INDEPENDENT SCHOOL LEADERSHIP

"The aim of the Klingenstein Center is to nurture and renew leadership among teachers and administrators who have distinguished themselves through their work in independent schools. The Center sponsors a variety of programs that address the needs of different constituents, beginning teachers, mid-career teachers and administrators and heads of schools. The focus is on professional development, believing that the most important component in educational advancement is not bricks and mortar, but the men and women who lead schools. To date, almost 1,400 educators from schools throughout the world have participated in Klingenstein Center programs."

PEARL ROCK KANE, The Klingenstein Family Chair for the Advancement of Independent School Education and Director, The Klingenstein Center

mission. The Institute accomplishes its mission through four core programs: The Governors' Education Planning Program; the Thomas H. Kean Governor of the Year Awards; the National Education Advocacy Program; and Leadership Seminars for Governor's Staffs. The Institute also publishes a quarterly report called The Governors' Briefing.

Further information is available from the Institute on Education and Government, Teachers College, Columbia University, Box 34, 525 W. 120th St., New York, NY 10027; telephone (212) 678-8402; e-mail: ieg@columbia.edu.

The International Center for Cooperation and Conflict Resolution (ICCCR)

offers a concentration in conflict resolution and a Certificate of Attendance that emphasizes theory, practice and research to address the needs of individuals, school systems, communities, non-profit groups, governments and private industry. The ICCCR's mission to help individuals, as well as institutions, better understand the nature of conflict and how to achieve its constructive resolution. The Center particularly emphasizes the importance of the social, cultural, organizational, and institutional contexts within which conflicts occur.

Housed in the Social-Organizational Psychology Program in the Department of Organization and Leadership, the Center embraces an interdisciplinary approach to conflict resolution and courses are open to



Pearl Rock Kane, The Klingenstein Family Chair for the Advancement of Independent School Education and Director, The Klingenstein Center

both degree and non-degree students, for credit or non-credit, throughout the College and the University. For courses and their descriptions, please see the program in Social-Organizational Psychology.

Research and training in the following areas are also supported by the ICCCR: (1) fostering collaborative approaches to conflict as well as developing negotiation and mediation skills; (2) conflict resolution in schools and industry, helping individuals to learn to manage their own conflicts constructively; (3) creating dispute resolution centers in schools to help students, teachers, administrators and parents resolve conflicts constructively; and (4) research and development analyzing which programs work in schools and industry. Conferences

as well as consulting services and training workshops based on sound empirical theory and research are provided.

The Center is directed by Peter Coleman, Assistant Professor of Psychology and Education. For further information, visit the ICCCR in Room 232, Horace Mann Building or contact the office: ICCCR, Box 53, Teachers College, Columbia University, 525 West 120th Street, New York, NY 10027; telephone: (212) 678-3402; email: ICCCR@columbia.edu.

The Esther A. and Joseph Klingenstein Center for Independent School Educa-

tion sponsors four programs aimed at the professional development of independent school teachers and administrators and research activities that contribute to the advancement of independent school education.

The Joseph Klingenstein Fellows

Award is granted annually to up to 12 outstanding teachers and administrators for participation in one semester or a year-long intensive program at Teachers College and designed to develop leadership skills in administrative or academic areas. Through reading, research, and discussion in seminars and course work at Teachers College and the other professional and graduate faculties of Columbia University, the program seeks to enlarge the perspectives of Fellows and prepare them to assume increased leadership responsibility within their sponsoring schools. As part of the program, Fellows

may earn graduate credits to be counted toward a degree at Teachers College. Any teacher or administrator of an independent elementary, middle and secondary school with a nondiscriminatory admissions policy is eligible to apply. The award includes a stipend, tuition allowance, a supplement for school age children relocating to New York City, and housing allowance for those who are resident faculty at boarding schools.

The Klingenstein Visiting Fellows Program for Heads of Independent

Schools allows up to fifteen heads of schools to spend three and a half weeks in residence at Teachers College, focusing on problems of particular relevance to their schools, engaging in coursework, meeting in seminars to discuss educational issues, and enjoying the cultural resources of New York City. The program provides school heads with the intellectual stimulation of studying with outstanding professors and the opportunity for meaningful dialogue with independent school colleagues. The purpose of the program is to prepare those already in positions of leadership to face the challenge of leading independent schools. As part of the program, Visiting Fellows may earn graduate credit to be counted toward a degree at Teachers College or elsewhere. Any school head of an elementary or secondary independent school with a nondiscriminatory admissions policy is eligible to apply. The award includes full tuition and fees, housing, and participation in New York City cultural events. Sponsoring schools are asked to provide round-trip travel expenses.

The Joseph Klingenstein Summer Institute Award is granted annually to teachers in the independent elementary, middle or secondary school sector who have demonstrated outstanding potential for leadership. The Institute is geared toward increasing classroom effectiveness and strengthening commitment to teaching as a career. The Institute program encompasses a variety of activities that are designed to: provide a forum for collegial

sharing, explore advanced methodologies in a particular subject area, stimulate fresh thinking and introduce new ideas in curriculum, methodology, and technique, and increase insight into the nature of educational practice. Each participant has an opportunity to earn four graduate credits applicable toward a Master's degree at Teachers College or elsewhere. Teachers with two to five years of experience are eligible to apply. Their school must have a nondiscriminatory admissions policy with regard to race, color, religion, or national origin. Candidates are judged on the basis of a personal essay, evidence of successful academic performance, and a letter of endorsement from the school head or principal. The award includes full tuition and fees, housing, and weekday meals. Sponsoring schools are asked to provide roundtrip travel expenses.

The Master's Degree with a concentration in Private School Leadership is cosponsored by the Department of Organization and Leadership and the Esther A. and Joseph Klingenstein Center for Independent School Education. The degree concentration is designed to enhance the professional careers of department heads, deans, division directors, and school heads or to prepare outstanding educators for such positions. The degree program has the following core components: administrative leadership of private schools, privatization and school choice in the US, seminar on teaching and learning in independent schools (for full-time students), legal aspects of school administration, behavioral research, resource allocation for nonprofit organizations, and strategic marketing. Students are required to participate in field service and to complete a research project in collaboration with a small group. The special features of the program include site visits to public and private schools and a connection to an extensive network of cooperating schools. The program attracts national and international students. Candidates should have at least three years teaching experience in

independent schools.

For further information contact the Klingenstein Center, Teachers College, Columbia University, Box 125, 525 W. 120th St., New York, NY 10027; telephone: (212) 678-3156; or visit the Center's Web site at www.klingenstein.org.

The National Center for Restructuring Education, Schools, and Teaching

(NCREST), established at Teachers College in 1990, supports restructuring efforts by documenting successful school improvement initiatives, creating reform networks to share new research findings with practitioners, and linking policy to practice.

NCREST works to develop understandings that help schools become: learner-centered by focusing on the needs of learners in decisions about school organization, governance, and pedagogy; knowledge-based, by restructuring teacher learning and professional development that are supported by disciplined inquiry; and responsible and responsive, by refocusing and re-inventing accountability and assessment practices.

Currently, NCREST is involved in a variety of projects including integrating technology with curriculum and educational technology, Professional Development Schools, teacher learning, student assessment, the documentation of successful school reform efforts in elementary and secondary schools, and the development of local, state, and national policies that reflect the relationship of research and practice.

Jacqueline Ancess is the director of NCREST. For further information contact NCREST, Teachers College, Columbia University, 525 W. 120th St., Box 110, New York, NY 10027; telephone: (212) 678-3432.

The National Center for the Study of Privatization in Education (NCSPE)

serves as a non-partisan venue to analyze and disseminate information about the contentious private initiatives in education that include vouchers, charter schools and educational contracting.

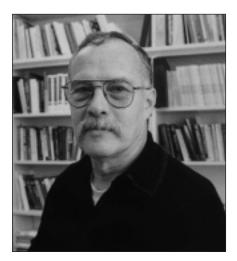
CURRICULUM MAKERS

"In preparing our graduate students to teach reading and writing, I urge them to think for themselves in the classroom, avoid orthodoxy, ask questions, be flexible, and don't take everything for granted. I want them to become researchers in the classrooms, documenting what they observe children doing, linking that to educational theories, and become curriculum makers themselves."

MARJORIE SIEGEL, Associate Professor of Education

Proponents of privatization view the movement as improving school choice, student outcomes and innovation through competition in the marketplace. They point to the poor performance of urban schools and how competition might convert failure into success. Opponents argue that the movement undermines already flagging urban public schools, depriving the system of motivated students and scarce resources to bring about reform, leads to increased segregation of students, and runs counter to the establishment clause embodied in the First Amendment of the United States Constitution.

Currently there is no disinterested authority to test and verify the conflicting claims of proponents and opponents, leaving the debate to those who argue on ideological grounds rather than empirical data. In evaluating different privatization plans, the center uses four criteria: the freedom for parents to



Henry M. Levin, Professor of Economics and Education



Marjorie Siegel, Associate Professor of Education

choose schools that mirror their values and religious beliefs; productive efficiency that maximizes school results; equity that provides access for all to the range of educational opportunities, and social cohesion that prepares youngsters for democratic and civic participation.

The Privatization Center is affiliated with the Department of International and Transcultural Studies. Its Director is Henry M. Levin, William Heard Kilpatrick Professor of Economics and Education. The Center disseminates its research, policy analysis through conferences, the World Wide Web, publications and the media. It also has entered a partnership with the education commission of the states to provide information to governors, state legislatures and state departments of education.

For information contact: Professor Henry M. Levin, NCSPE, Teachers College, Columbia University, 525 W. 120th St., Box 181, New York, NY 10027; telephone: (212) 678-3259; Web site: www.ncspe.org.

The Rita Gold Early Childhood Center

serves to support and promote the growth and development of infants, toddlers, preschoolers and their families through four inter-related practices: supportive early care and education for very young children; transdisciplinary professional preparation for students; ongoing research to improve practice and inform theory in early development, care and education for young children and families; and outreach within and beyond the Teachers College community. Located at the College, the Center provides inclusive and culturally responsive care within mixed-age groups for children ages six weeks through five years and their families who are affiliated with Columbia University. Founded in 1982 as the Center for Infants and Parents, the Center's growth and development has been supported over the years through the gifts of many kind and generous donors. We are grateful to Rita and Herbert Gold for their support of our most recent expansion.

The Rita Gold Center is a resource for students across the College who are engaged in observation, teaching, and research with young children and families. Supervised practica focusing on educational and developmental issues for infants, toddlers and preschoolers are offered on site at the Center.

For further information contact: Isabel M. Belinkie M.S., On-Site Coordinator, Rita Gold Early Childhood Center, Teachers College, Columbia University, 525 W. 120th St., Box 98, New York, NY, 10027; telephone: (212) 678-3082.

STANDARDS WITHOUT RESOURCES IS A RECIPE FOR DISASTER

"All of us concerned about the quality of education in our public schools believe in high standards to improve student performance. It is self-defeating, however, to impose standards, as New York is doing, without providing the resources to implement them. The proper way to introduce new standards is to analyze the approaches necessary to achieve them and then work back to determine what that would cost and allocate the funding to phase in the qualifying examinations. Teachers need lead time for retraining to prepare students for the tests and students need a long time to prepare to take the tests. It is eminently unfair to prescribe tests for graduation without fulfilling the prescription."

GARY NATRIELLO, Professor of Sociology and Education and Acting Director, Milbank Memorial Library

The Teachers College Reading and Writing Project is a staff development organization that works in intimate and long-lasting ways with communities of educators in the New York City metropolitan area and also provides more limited assistance to educators in schools from all over the United States. Currently the Project serves over 100 schools.

For two decades, the Project has supported educators establishing reading and writing workshops in which teachers act as mentors and coaches to children. Project staff and teachers become co-researchers, observing what children do in writing and reading, theorizing about what their behaviors mean, and planning teaching moves to help them learn. To nurture this school-based work, Project staff meet at the College with educators from Project schools: Each week over 100 teachers gather in study groups focusing on becoming teacher-leaders in workshop teaching, and each month over 100 principals gather focusing on the problems, challenges, and opportunities of being a school leader in literacy education.

The Project's school-based consulting, study groups, and think-tanks are complemented by an array of other professional education opportunities at the College. Throughout the year, thousands of teachers attend sixty full-day Project-



Gary Natriello, Professor of Sociology and Education and Acting Director, Milbank Memorial Library

run conferences providing information and insight about how to structure and sustain high quality literacy education. Every summer, three thousand teachers attend one of several week-long Project Institutes which include keynote addresses, small groups study, and interactive discussion groups.

The Project was founded and is directed by Lucy McCormick Calkins, Professor of Education. For further information contact the Teachers College Reading and Writing Project, 525 W. 120th St., Box 77, New York, NY 10027; telephone: (212) 678-3104.

THE MILBANK MEMORIAL LIBRARY

The Milbank Memorial Library of Teachers College is one of the nation's largest and most comprehensive research libraries in education. The library's collection provides a wealth of source materials for advanced study and research in education, psychology, and the health professions.

The library collection is comprehensive in American elementary and secondary education, and in such subject areas as psychology, particularly applied psychology, educational administration, the history and philosophy of education, guidance, special education, higher and adult education, speech and language pathology and audiology, health and nursing education, nutrition, curriculum and teaching, communications and computing technology, recreation, and international and comparative education. Research resources in printed, nonprinted, and electronic formats include all important reference works; a wide selection of monographs; extensive journals; and major indexing and abstracting services.

Distinctive Collections

The library is noted for the variety and depth of its distinctive collections of materials documenting education in its local, national and international dimensions. These include: the Rare Books in

Education Collection, classic works on education dating from the 15th through the 19th centuries; the Darton Collection of British children's literature of the 17th through 19th centuries; the Historical Collection of American and British children's books of the 19th century; the Annie Moore Collection of illustrated children's literature; the American nineteenth century textbook collection; and the International Textbook Collection, comprising elementary and secondary school texts from throughout the world.

The Adelaide Nutting Collection of books, pamphlets, and manuscripts on the history of nursing and the David E. Smith Collection of writings on mathematics education provide unusual depth of coverage in their fields. Other notable holdings include the International Collection of works on education abroad, extensive collections of 20th century textbooks and courses of study, and a regularly updated collection of 20th century fiction and nonfiction for children.

Manuscripts and archival collections cover a wide range of educational topics and include the records of such major organizations as the National Council for the Social Studies, the Board of Education of the City of New York, the Bank Street College of Education, the William T. Grant Foundation, the National Kindergarten Association, and the American Montessori Society.

The Teachers College Archives holdings include the records of college offices and the papers of individual faculty members. Major collections include the papers of Dean James Earl Russell, Dean William Russell, and President Hollis L. Caswell, the historical records of the Nursing Education program, the Guidance Laboratory Test Collection, the records of the Peace Corps Training Program and of international education programs in Asia, Africa, and Latin America. Notable faculty papers include those of William H.

Kilpatrick, Paul Monroe, A. Harry Passow, and other leaders in education throughout the twentieth century.

Academic Information Resources and Services

MilbankWeb, the library's World Wide Web site, located at http://lweb.tc.columbia.edu, is the focal point for a growing array of library services that support instruction and research at the College. MilbankWeb combines news and information, access to local and remote databases, and exhibits that showcase the accomplishments and contributions of notable Teachers College persons and programs, particularly as they relate to or are reflected in library collections and archives. Through advances in electronic information resources and global networks, library users increasingly have access to the 'virtual library,' providing the means to search and retrieve a growing percentage of the universe of documents and files. The home page is accessible during regular library hours from workstations in the library, and at all times from any computer with a Web browser and access to the Internet.

EDUCAT, the online public access catalog, integrates the library's catalog information with up-to-the-minute circulation, reserve, acquisitions, and serial control information. The EDUCAT database currently includes over 689,000 volumes and plans are under way to add all of the library's print and non-print collections. EDUCAT is available during regular library hours from workstations in the library, and at all times through the library's home page; through telnet to: 128.59.88.2. The web version of EDUCAT is available at http://lweb.tc.columbia.edu. This site includes over 1,400 records with direct links to full-text journals on the World Wide Web.

The Columbia Connection

Access to CLIO via EDUCAT is the means for our students to connect to the collection of the Columbia University library system, the nation's seventh largest academic library housing more than six million volumes, four million units of microfilm, 2,500 separate collections, important maps, phonograph records, pamphlets and CD-ROMs.

To facilitate access to scholarly materials, the libraries have developed Library Web, a powerful integrated Web-based library computer system. This resource links users to library catalogs, electronic reference tools and indexes, digital collections (including numerous electronic journals), subject guides and bibliographies, search engines, and extensive information on individual libraries, services, and events.

Milbank Services

The Research Services Department provides reference, research support, and library instruction services, including instruction in the use of online and card catalogs, assistance with reference materials, referral to other libraries, bibliographic instruction, research consultation, course-specific instructional support, and assistance in the use of hundreds of Web-based information resources.

Reference queries, suggestions and recommendations, and requests for services may be submitted in person or by e-mail via the library's home page. Interlibrary Loan provides Teachers College students, faculty, and staff with access to books and periodical literature not owned by Milbank Memorial Library or Columbia University Libraries. By use of national and world-wide catalogs and through cooperative agreements with libraries around the world, the Library can provide a book, dissertation, or photocopy of an article.

The Office of Access and Services for Individuals with Disabilities provide a variety of special equipment and services for differently-abled users.

The Periodicals, Microforms, and Copy Services (PMC) manages 3,000 currently received serial titles, including journals, newspapers, and other serials in hard copy and microform as well as dissertations on microform, college catalogs, and the complete ERIC Document Collection on microfiche.

In its development as a model school library, the Resource Center supports instructional programs of Teachers College and provides curriculum orientations and workshops in the use of K-12 printed collections, multimedia and Internet resources. Also hosted are teleconferences and demonstrations of new educational software. Cooperative outreach efforts include a weekly story hour for local school children and technology instruction for local school teachers. The Center provides two small computer laboratories, with facilities for viewing educational software, multimedia, audiovisuals, and microfiche. The department's presence on Milbank Web at http://lweb.tc.columbia.edu/cs/modelsl/index.htm features virtual information services; online collections; curriculum exhibits; a conference room; demo lab; and children's activities.

The Access Services department provides library patrons prompt access to all circulating and non-circulating items. Services include processing course reserve and "rush" catalog requests; placing holds and recalls; collection maintenance; and electronic renewal for users via the World Wide Web.

For further information contact Milbank Memorial Library, Teachers College, Columbia University, 525 W. 120th St., Box 307, New York, NY 10027; telephone: (212) 678-3494.

COMPUTING AND INFORMATION SERVICES

Computing and Information Services (CIS) is responsible for academic and administrative computing, media services, the campus data, voice and video network, and telecommunications. These services include e-mail and course Web pages, desktop computers, student laboratories, multi-media classrooms, audiovisual services, management information systems, telephone and satellite and video-conferencing connections, and residential cable television. More extensive information may be found at the Computing and Technology Resources link on the main TC homepage: www.tc.columbia.edu.

Electronic Mail Accounts

Teachers College students, faculty, and staff may use e-mail accounts provided by Columbia University Academic Information Services (AcIS). In addition to campus and Internet communications, these accounts also provide space for personal home pages. This e-mail can be accessed from the Internet. Columbia maintains a modem pool for dial-up access from home, which affords access to the Columbia domain as well as the Internet. From anywhere in the five boroughs of New York City, this is accessed as a local call. More information can be found on the Columbia Academic Information Services page: www.columbia.edu/acis. Faculty and staff also have MS Exchange e-mail accounts hosted at Teachers College to foster workgroup computing.

Policy on Acceptable Use of Information Technology Resources at Teachers College

Objectives

The purpose of this policy is to promote and improve the effectiveness of Teachers College computing and communications resources. As an academic community, the College places a special value on free expression of ideas. However, unlawful or inappropriate use of these information technology (IT) resources can infringe the

rights of others. Accordingly, all members of the College community are expected to use these resources responsibly. Prevention of abuse of the College's IT resources is important to:

- promote the appropriate and productive use of the College's information technology resources, which are a finite, shared resource of the College community;
- protect individuals from annoyance and harassment;
- prevent waste of the IT resources and obstruction of College activities; and
- protect the College against seriously damaging or legal consequences.

The information technology resources of

the College are part of the Columbia

Policy

University network, and therefore all College users must be familiar with and adhere to the University's policies found at www.columbia.edu/acis/policy. Use of College information technology resources must also conform with College policies, regardless of explicit reference in those policies to electronic or other media. Policies including those related to professional conduct, sexual harassment and others are found at www.tc.columbia.edu/administration/hr/pol_p ro/polprohome.htm and in the Student Handbook at www.tc.columbia.edu/administration/student-handbook. College IT resources shall not be used to violate any City, State or Federal laws or any College or University policies. Copying, storing, displaying, or distributing copyrighted material using College or University computers or networks without the express permission of the copyright owner, except as otherwise allowed under the copyright law, is prohibited. Under the Digital Millennium Copyright Act of 1998, repeat copyright infringements by a user of the College's IT resources can result in termination of the user's access to those resources. It is not acceptable to attempt to gain access to or use another

person's ID, password or account, nor to

send an email impersonating another individual, regardless of where the email originates. Sharing of passwords is prohibited and each user is responsible for the proper use of his or her account and any activity conducted with it.

Communication at the College, regardless of whether it is spoken, written or electronic, should be conducted courteously, and with respect for other people's ideas, privacy, intellectual property, and right to be free from intimidation, harassment, and unwarranted annoyance, including, but not limited to, chain letters, and obscene and other unwelcome messages. All email and postings should have the name of a person from or for whom it is sent, even if replies are not permitted. Broadcast messages to large lists should have an educational or work-related significance to many members of the group. Messages or files that interfere with or impair the computers or activities of other people are not allowed. This includes viruses, worms and Trojan horses.

Consequences for failure to abide by this policy may range from warnings to suspension of email and other computing privileges to dismissal, termination of employment or criminal proceedings.

Complaints

Individuals who believe that there has been a violation may contact the Associate Dean or the Director of Information Technology.

Current contacts are: William Baldwin, Associate Dean: wjb12@columbia.edu, 678-3052, 113 Main Hall.

V. Ena Haines, Director of Information Technology,

ena@exchange.tc.columbia.edu, 678-3486, 241 Horace Mann.

Campus Network

Data, voice, and video outlets are found in every classroom, office, and residence on the main portion of the campus. Internet and Internet-2 access are provided by Columbia University.

Public Computing Facilities

The Microcomputer Center in 242 Horace Mann provides students with PCs and Macs, software, printers and other peripherals. This laboratory is open daily. The Center's software library includes PC and Mac programs for word processing, Web development, graphics, statistical analysis, qualitative analysis and databases. A current list is maintained on the Computing and Technology Resources Web site (www.tc.columbia.edu/cis) under Software Applications.

Computer classrooms with workstations at each seat in 345 Macy (see below) are available for open use when not scheduled for instruction.

Email and local Web sites are also accessible from 19 kiosks located in corridors on the first and ground floors of campus buildings and the Student Lounge. Milbank Library has more than 50 public workstations connected to the Internet, including some which are specially equipped for disabled users.

TC ClassWeb

The second generation of college-wide courseware, ClassWeb provides precreated Web sites which faculty can customize for each class each semester. Features include syllabus, discussion, chat, filesharing, and subgroups. These sites are used by most regular TC classes and also support classes taught to students at a distance.

Instructional Media Lab

The Instructional Media Lab (IML) in 265 Macy is a facility for students and faculty to create rich content for classes, online learning, student teaching, and research. Digital cameras and other equipment are loaned. Workstations allow for computer-based full motion

video from camera, VCR, or videodisk to be edited, integrated with animation and digitized voice and music and to be written to CD, DVD, or tape. IML also provides satellite downlink.

Computer Classrooms

Computer classrooms for hands-on instruction include both a PC and a Macintosh room in 345 Macy. The Goodman Family Computer Classroom suite includes a classroom equipped with 32 notebook computers on tables that can be reconfigured to accommodate varying workgroup sizes. Located in 234 Horace Mann, it also has a seminar room for 10 people. The Macy rooms are available for use by students and faculty when not scheduled for instruction.

Multi-media Classrooms

Multi-media display classrooms provide equipment such as PCs, Macs, VCRs audio-tape players, and document cameras. Currently more than 20 percent of our 65 classrooms have such dedicated computer and projection equipment, with plans for additional ones to be added each year. In addition, all classrooms have campus network connections, and laptops and projectors may be borrowed from Media Services. There are about 42 classrooms with secured carts with a VCR and monitor, another 12 carts may be reserved for use in other rooms. Video-conferencing connections are provided for special events at any location upon request.

Training

Training workshops are scheduled throughout the year on how to use electronic mail, word processing, spreadsheets, the Internet and Web publishing, statistical analysis, photo and video manipulation, and multimedia authoring. In addition to workshops, individual training is also available. Academic Computing Services also provides auto-tutorial materials on CD-ROMs.

Addressing Communications Disorders

"Speech pathology is a profession that focuses on preventing and rehabilitating a wide variety of communications disorders and difficulties. They include articulation disorders, language delay, accent problems, stuttering, swallowing problems, and deficits from strokes. In addressing these concerns, our graduate students work with clients in clinic settings on campus and in field placements off campus. One of the reasons our graduates are so much in demand as professionals is the wealth of practical experience they have. That, combined with the physiological and neurological aspects of speech, leads them to career positions in schools, geriatric clinics, hospitals, rehabilitation units, speech clinics, and private practice. Our students need not have undergraduate training in the field, but we attract the best and most interesting candidates because of the rigorous and rewarding program we offer."

Patricia Sweeting, Director, Edward D. Mysak Speech-Language and Hearing Center

Administrative Systems

Students are able to register, drop and add classes, check financial aid, academic history and current grades or pay by credit card using Touchtone and World Wide Web access.

Microcomputer/LAN Services

Student support is provided at the Microcomputer Center and in the residence hall.

All faculty and staff have workstations appropriate to their work, with budgeted replacement at 25percent per year. The local area network features file and print services as well as Microsoft Exchange, webservers and other applications. The CIS Help Desk provides problem resolution via telephone and office visits.

Residential Telecommunications Services
Telephone, voice mail, Internet and cable television services are provided in student and faculty residences. Those living in Whittier and Lowell Halls have direct connections to the campus data network. In family housing, residents have cablemodem Internet access. Detailed information is found on the Computing and Technology Resources (www.tc.columbia.edu/cis) site under Telephone and Cable TV.

INSTRUCTION AND RESEARCH SUPPORT SERVICES

Center for Educational and Psychological Services

Director: Dinelia Rosa, Ph.D.

The Center for Educational and Psychological Services is both a training and research center for the College and a community resource that provides help to people of all ages with educational and personal problems. The services offered include full psycho-educational evaluations and educational evaluations focusing on learning issues coupled with appropriate remediation, instructional planning and instruction for students with disabilities, adult and child psy-

chotherapy, personal and vocational counseling and psychological diagnostic evaluation. Several hundred psycho-educational assessment and evaluation instruments, as well as a growing library of materials for reading remediation are available for use by the students attending practica affiliated with the Center.

Services are provided by advanced graduate students from the Clinical/Counseling, Curriculum & Teaching, and Health & Behavior Departments. All work is supervised by full-time and/or adjunct faculty of the College's programs. Fees are set on a sliding scale that is designed to meet all budgets.

Further information and applications for service may be obtained by calling (212)



Patricia Sweeting

CONTINUOUS LEARNING IN A DIVERSE COMMUNITY

Victoria M. Ndibo taught nutrition to adolescents in Kenya for ten years before enrolling in Teachers College to study early childhood education and organizational psychology. Her interest in both fields is to prepare her to establish an affordable nursery school in Kenya and have the background to bring organizational principles to bear on school management. "I have benefited," she said, "from working in a diverse community at Teachers College comparable to the diverse tribes and expatriates one finds in Kenya. Moreover, I realized how important it is to regard learning as a continuous process and how Teachers College encourages lifelong learning with its part-time programs."

VICTORIA M. NDIBO, Candidate for a M.A. in Early Childhood Education and Organizational Psychology



Victoria M. Ndibo

678-3262; by writing to the Center for Educational and Psychological Services, Teachers College, Columbia University, Box 91, 525 West 120th Street, New York, NY 10027-6696; or by coming to the Center on the sixth floor of Thorndike Hall.

Edward D. Mysak Speech-Language and Hearing Center

Director: Patricia M. Sweeting, Ph.D., CCC-SLP

Assistant Director of Speech and Language Services: Laura Fitzpatrick-Nager, M.A., CCC-SLP

Director of Audiology Services: Teresa Boemio, M.S., CCC-A

The Edward D. Mysak Speech-Language and Hearing Center provides advanced students in the Speech and Language Pathology and Audiology master's program with practical experience in a professional setting. The Center offers evaluation and therapy services to individuals in the College, University, and community who may have speech, voice, language, or hearing problems. A complete speech and language and/or hearing evaluation is scheduled; speech and language therapy sessions, a minimum of two forty-five minute sessions a week, are conducted on an individual and/or small group basis. Special clinics are also available for infant evaluation, stuttering treatment, and accent reduction. Aural rehabilitation services, including hearing aid dispensings, counseling about effective use of amplification strategies, assistive listening devices, speechreading, and auditory training therapy are available for both children and adults.

In addition, the Center opened an augmentative communication clinic in the Spring of 2001 to offer assessment and intervention services to children and adults in need of alternative communication devices and technology.

The Center also offers a language stimulation program for young children with late expressive language and their parents. This early intervention program includes theme-based play sessions and a parent education group.

Initial contacts with the Center may be made in person, by letter, by telephone,

or by referrals from professionals and agencies. A sliding fee scale is available. Further information may be obtained by calling (212) 678-3409 (speech and language services) or (212) 678-3408 (audiology services) or writing the Center at Teachers College, Columbia University, Macy 169, Box 191, 525 W. 120th St., New York, NY 10027.

Teachers College Press

Director: Carole Pogrebin Saltz

Established in 1904 as the Bureau of Publications, Teachers College Press is one of the oldest and most distinguished publishers of educational materials in the United States. Since 1965, when the Bureau of Publications became Teachers College Press, its primary purpose has been to publish works that respond to, examine, and confront issues and change pertaining to education and the educational process. Over the years the publication program has included scholarly and professional works in the humanities, the sciences, psychology, philosophy, women's studies, nursing, and healthrelated fields. The Press also produces various kinds of classroom materials and assessment instruments. It now publishes about 55-60 books a year and has over 500 titles in print. The Press's authors include many members of the Teachers College faculty, as well as distinguished educators from throughout the world.

FINDING YOUR OWN VOICE

"As a student teacher of music in the public schools, I learned the best way of teaching is to encourage kids to teach themselves. For example, when I wanted to focus on theme and variations in music, I had the students show me different ways to bounce a basketball. That way, they were able to make the connections. Whenever students encounter difficulties, I ask them to look inside themselves, to find their own voice and trust their own voice to deal with problems. I find I am constantly evaluating and re-evaluating how I am teaching, how students respond to me and how I respond to them."

ARAM J. BAJAKIAN, Candidate for Master of Arts in Music Education

TEACHER EDUCATION PROGRAMS AND INTERNSHIPS

Teacher Education Programs

Teachers College offers a wide variety of educational experiences for students at the preservice and in-service levels. The Office of Teacher Education assists the many teacher education programs located in various departments at the College. Programs are field-based, offering up to two semesters of observations, internships, and student teaching.

Departments offer, for qualified holders of a Bachelor's degree, programs that lead simultaneously to a Master of Arts degree and to New York State certification for teaching in elementary or secondary schools. Many of these departments also offer New York State Teacher Certification with a bilingual extension. Except for candidates who have completed student teaching before admission to Teachers College, the programs require an academic year and a summer term (see both the statements in this catalog and the supplementary requirements bulletins of the departments listed below). Applicants need not have included courses in education in their undergraduate programs, but inadequate preparation in the proposed teaching field may necessitate additional course work to fulfill the usual requirements for the Master's degree.

Application for admission to all programs should be made to the Office of Admission, Teachers College. In some programs enrollment is limited; thus early application for admission is advisable. Some programs offer partial tuition grants to qualified applicants. Persons interested in learning more about the College's preservice and in-service programs in teacher education should contact the Office of Admissions.

New York State and New York City Certification of Teachers and Administrators

Requirements for teaching and administration and supervisory positions vary throughout the country. The completion of a degree does not automatically mean fulfillment of state/city certification requirements in states other than New York. Such requirements are to be taken into consideration during program completion. Test requirements also vary from state to state.

A passing score on the New York State Teacher Certification Examinations (NYSTCE) is required for those wishing New York State Certification in secondary academic subjects and in elementary education. All persons applying for New York State Certification must have proof of completion of a two-session course providing instruction in the detection and reporting of child and substance abuse. In addition, applicants for New



Aram J. Bajakian

York State Teacher Certification must satisfy qualitative and personal requirements. For permanent certification, applicants must receive a Master's degree in the field, or a related field in which he or she received a provisional license and complete two years of full-time teaching experience on the provisional license. Students desiring to fulfill requirements for teacher certification in states other than New York should confer, at an early stage of their study, with the Associate Dean for Teacher Education.

For New York State certification, the student obtains from and returns to the Registrar the appropriate New York State

Teacher Certification Application form. Students desiring New York City licensure as a teacher or administrator should inquire at the New York City Board of Education, Division of Personnel, 65 Court Street, Brooklyn, NY 11201, to ascertain specific requirements.

New York State approved teacher education programs are available in:

Elementary Education Nursery through Grade 6

- Nursery schools, day-care centers, kindergartens, elementary, and middle schools (ages 2 to 14) through the programs in Curriculum and Teaching
- Art, music, and dance through the programs in the Department of Arts and Humanities
- Teaching of remedial reading and teaching the mentally retarded, physically handicapped, hearing impaired, visually impaired, emotionally disturbed, neurologically impaired through the programs in the Department of Health and Behavior Studies

Intermediate or Middle Schools and Junior and Senior High Schools

- Elementary education for intermediate or middle schools through the programs in Curriculum and Teaching
- Remedial reading through the programs in the Department of Health and Behavior Studies
- English, social studies, TESOL, art and music through the programs in the Department of Arts and Humanities
- Physical education and speech pathology through the programs in the Department of Biobehavioral Sciences
- Mathematics, general science, biology, chemistry, earth science, and physics through the programs in the Department of Mathematics, Science and Technology

• Bilingual education through the Department of International and Transcultural Studies

Student Teaching and Prerequisites

The student must satisfy certain requirements set by the department in the areas of specialization.

Elementary Childhood Education

Students enrolled in pre-service programs in Early Childhood or Elementary Education (preparing for certification in Elementary Education) must take student teaching courses. The program includes all-day and part day student teaching for one or two terms. State regulations require students teach at the lower elementary grade levels (K–3) and at upper elementary grade levels (4–6).

Junior High School and Senior High School Teaching

Before beginning student teaching, students preparing for teaching fields at the secondary level must as a rule have been enrolled at Teachers College for a specified period of time to be determined by the department. Summer attendance may be applied toward this requirement. Because of new New York State requirements, many students must have student teaching experience at both the junior high (grades 7-9) and high school (grades 10–12) levels. Some departments require students to complete both placements in the course of one semester, others require two semesters of student teaching, either in the regular terms. In planning programs, students must be prepared to meet the heavy time demands of student teaching in the cooperating schools and in the student teaching seminars. Programs usually require student teachers (1) to have all mornings (or in some cases all afternoons) free for student teaching throughout the entire Autumn or Spring term, or both terms of the cooperating school and (2) to carry a reduced program (including the credit for the student teaching course) while

doing student teaching. More specific information is available from each department.

Special Education

Students enrolled in pre-service Special Education programs must take student teaching courses. The programs usually include all-day or part-day student teaching for one or two terms. More specific information is available in the areas of specialization in the department.

Procedures for Student Teaching and Field-Based Teaching

Since early arrangements must be made for placing prospective candidates in cooperating schools, students interested in student teaching courses should secure the student teaching application form from the Office of Teacher Education (Box 97) well in advance of the term in which they wish to enroll in student teaching and should request a copy of "Student Teaching Procedures Manual" which lists contact people in individual programs.

Teacher Opportunity Corps

The Teacher Opportunity Corps has been established to encourage individuals to prepare to teach in urban settings and to serve the needs of students at risk of dropping out of school. The program emphasizes knowledge of urban schools, effective teaching strategies, and reflection on teaching. Students who are N.Y. State residents, who are not permanently certified to teach in N.Y. State, and are African-American, Hispanic, Native American or Alaskan-American are eligible for this program. Those selected for this program are awarded a stipend each semester and are eligible for a variety of academic supports. For more information and application materials contact The Office of Field Services and Support, Teacher Opportunity Corps, Teachers College, Columbia University, Box 97, New York, NY 10027; telephone: (212) 678-3466.

DEVELOPING CAREERS

"The Career Services Center strives to provide current students and alumni with a range of career development resources in order to position them for advancement in their present field or to serve as a transition into a new career path. Students and alumni have the ability to interact with the Career Services Center staff both in person and online. This enhances the Center's ability to be much more comprehensive in meeting the needs of the constituencies we serve by circumventing geographical and time challenges. The Career Services Center wants to be an integral part of every student and alumni's academic experience at Teachers College and welcomes the opportunity to participate in their professional development."

MARIANNE TRAMELLI, Director of Career Services



Marianne Tramelli

Peace Corps Fellows Program

Returned Peace Corps volunteers with a strong commitment to teach in the demanding urban environment of New York City are placed in full-time, salaried positions in the public schools and attend Teachers College part-time. The Program, the first of its kind in the United States and now in its second decade, carries a two-year commitment with at least an additional two years of teaching in the city strongly encouraged. The Program is for Master's Degree (only) candidates in the following teacher shortage areas: Bilingual (English/Spanish) Education (pre-K-6), Math or Science (grades 7-12), Special Education (please call for specifics) and ESOL (pre-K-12). For

more information please contact The Peace Corps Fellows Program, Box 90, Teachers College, Columbia University, 525 West 120th Street, New York, NY 10027, telephone 212-678-4080. The Program's Web site can be accessed at www.tc.columbia.edu/pcfellows.

Inter-University Doctoral Consortium

Teachers College participates in the Inter-University Doctoral Consortium which provides for cross-registration among member institutions. Fully admitted doctoral candidates in Teachers College may register for courses at the Graduate School and University Center of the City University of New York, Fordham University, the New School for Social Research, and New York University. Ordinarily, such courses must not be available within Columbia University. Applications are available in the Office of the Associate Dean, 113 Main Hall.

Students taking cross-listed 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 to Teachers College for any such courses they take.

STUDENT LIFE AND STUDENT SERVICES

Teachers College combines a large number of part-time students who are very much involved in professional education circles with full-time students preparing for careers in education. Part-time students are largely commuters, while full-time students usually reside on or nearby the campus. Student life and student services are organized to meet the sometimes separate and different interests of both full-time and part-time students.

Depending on their availability and schedules, Teachers College students can take advantage of an array of activities and services. They include career services, student organizations, student government, fitness and recreation, health services and insurance, and social and cultural activities.

Career Services Center

The Career Services Center provides current students and alumni with the career planning resources essential to the development and refinement of their job search skills.

Individual consultations and group workshops on career planning and job development equip participants with the skills necessary for a successful job search. Students and alumni have online capabilities



to search databases of employers and job descriptions, submit resumes and cover letters, and sign up for on-campus and off-campus interviews.

As part of this online recruitment program, employers are able to offer Teachers College students and alumni both internship and full-time positions. In addition, a range of other job opportunities, external to the on-campus recruitment program, are available as online postings that students and alumni can review and apply to directly.

Corporate recruiting is scheduled during both the Fall and Spring semesters, while School District recruiting typically occurs in the Spring. In April, two education job fairs are offered, the K-12 Education Job Fair and the New York City Board of Education Job Fair.

Recruiting for positions in human services occurs at the Resume and Information Exchange each February. Not-for-Profit organizations visit the campus in April for the Columbia University sponsored Not-for-Profit Job Fair.

Also online, the Alumni Mentoring Initiative offers a forum where alumni and students can connect to engage in net-

working and information sharing. For those students and alumni requiring a centralized location for letters of reference and other pertinent materials for graduate school application and/or for conducting a job search a 24-hour 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.columbia.edu/~career-services/. Sample resources include: career and job search guides, school directories, educational publications, teacher certification information, and graduate study and teacher licensing examination bulletins. Additionally, students can visit the Career Services Centers of Columbia University and other peer institutions to broaden their job searches.

Student Life Center

The Student Life Center includes four major areas: Health Services and Immunization, International Services, Student Activities and Recreation. Through the promotion of social, cultural, co-curricular, recreational and professional programs, the center seeks to build communication.

nity, celebrate diversity, develop leadership, and foster healthy living.

Student Organizations

Student organizations enrich campus life with a focus on social, cultural, academic, and professional areas and networking among students with common interests. Among them are:

- American Sign Language Club
- Black Student Network
- Coalition of Latino/a Scholars
- Current Issues in Comparative Education (CICE)
- Kappa Delta Phi, a national honor society
- Korean Graduate Student Association
- Lesbian, Bisexual, Gay and Transgender Community
- National Art Education Association
- Society for Human Resource Management
- Society for International Education
- Student Alliance on Multicultural Mental Health Issues (SAMMI)

The Teachers College Student Senate represents the student body with elected representatives of the various departments. Serving as the advocate for students on campus, the Senate responsibilities include engaging in and influencing College-wide decision-making, facilitating College-wide communications with students, and identifying common problems that students may encounter and working on practical solutions.

International Student and Scholar Services

Teachers College has a long history of welcoming international students to our academic and social community. Currently, about 600 students from 75 countries are enrolled at all degree levels and in every department. International Student and Scholar Services provides extensive orientation and intercultural programs throughout the year; advice on responsibilities, benefits and alternatives

EQUAL ACCESS FOR STUDENTS WITH DISABILITIES

"Teachers College strives to be responsive to both the letter and spirit of the Americans with Disabilities Act and provide a wide range of individual services for students with different disabilities. Services that deaf students request include sign language interpretation and notetaking. Blind students may be assisted by readers and research assistants and a variety of alternative formats to access the printed word. Students with physical disabilities have access to campus facilities along with a variety of low-tech and high-tech support services. We support students with learning disabilities with strategies to manage reading and writing tasks along with individualized testing accommodations. Our aim is to ensure equal access for students with disabilities to all Teachers College academic programs and events. As a colleague with a disability, I hope that students find our office empowering yet sensitive."

RICHARD KELLER, Director, Office of Access and Services for Individuals with Disabilities

under Immigration laws and regulations; and counsel on personal, financial, cultural, academic and other concerns. The International Student Advisors also assists students in contacting campus and community resources when it is appropriate. The office is located in 163 Thorndike Hall; telephone (212) 678-3406. Students can contact the advisors by email at tcintl@columbia.edu. In addition, prospective, admitted and current students are encouraged to go to www.tc.columbia.edu/~international for upto-date information.

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 swimming pool for student and faculty use.

Health Service and Student Medical Insurance

Primary care, women's health, counseling, travel, health education and wellness services are offered free or at a nominal charge to students who have paid the Health Service fee. The fee is mandatory for all full-time students and all students living in college residence halls. When hospital care is necessary, most costs are defrayed by a student medical insurance program available through Teachers College. Information in available from the Student Life Center.

Immunization

New York State requires that all students born on or after January 1, 1957 provide proof of immunity to measles, mumps, and rubella. Hepatitis B and DPT are strongly recommended, as well as results of a current PPD test for tuberculosis. The PPD is required for practice teachers.

Individuals with Disabilities

Programs and services have been developed to ensure that the higher education environments at Teachers College are physically, programmatically, and attitudinally accessible to individuals with such disabilities as vision, hearing, or mobility impairments, medical conditions such as diabetes, cancer, or heart disease, or a learning disability that



Richard Keller

affects one or more academic activities. Limited parking is available for individuals with disabilities. A full-time Director of Access and Services for Individuals with Disabilities and assistants are available to counsel students, arrange accommodations, and advocate on behalf of students with disabilities. For more information call 212-678-3744.

Other Services

Other services available to students include the Teachers College Bookstore, Teachers College Cafeteria, Information Desk, Psychological Counseling Services, the Rita Gold Early Childhood Center, Office of Ombudsman, ATM and postage machines.



Faculty Members and College Officials

- 66 Faculty
- 90 Special Term Faculty
- 98 Officers Not In Active Service
- **100 Trustees and Officers**

Current as of July 2002

Harold F. Abeles

Professor of Music Education
Department of Arts and
Humanities
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).

James Albright

Assistant Professor of English Education
Department of Arts and Humanities
B.A., Trent University; B.Ed.,
Dalhousie University;
M.A.Ed., Mount Saint Vincent University; Ph.D., Pennsylvania State University

SCHOLARLY INTERESTS: Rethinking English as literacy education. Researching literate identities from critical and cultural studies perspectives. Emerging technologically related literacies. The reflexive sociology of Pierre Bourdieu.

SELECTED PUBLICATIONS:
"Being in Authority, Being an Authority: Disrupting Students'/Teachers' Practices"
(Teaching Education). "Louise Rosenblatt seeks QtAznBoi for LTR: Chat Rooms in English Language Arts Classrooms"

(Journal of Adolescent & Adult Literacy). "Oracy, critical theory, and secondary English Education" (Contemporary Issues in Canadian Secondary English). "Working the Teacher: A case study in the politics of pedagogy" (Teaching Education).

John P. Allegrante

Professor of Health Education
Department of Health and
Behavior Studies
B.S., SUNY, Cortland; M.S.,
Ph.D., University of Illinois

SCHOLARLY INTERESTS: Health education in multiple settings. Health policy. Interdisciplinary behavioral research. Public health education workforce.

SELECTED PUBLICATIONS: Investing in Employee Health (Jossey-Bass). "When health policy becomes victim blaming" (New England Journal of Medicine). "The President's Committee on Health Education: A 20-year retrospective on its politics and policy impact" (American Journal of Public Health). "Continuing education needs of the currently employed public health education workforce" (American Journal of Public Health). "Improving health behaviors and outcomes after angioplasty: Using economic theory to inform intervention" (Health Education Research). "Theorycomparison and multiplebehavior research: Common

Gregory M. Anderson

cation Research).

themes advancing health

behavior research" (Health Edu-

Assistant Professor of Education Department of Organization and Leadership B.A., M.A., University of Toronto; Ph.D., City University of New York; Minority Postdoctoral Fellow, Teachers College

SCHOLARLY INTERESTS: U.S. higher education policy and reform. Higher education in South Africa. Remediation and academic development. SELECTED PUBLICATIONS: Building a People's University in South Africa: Race, Compensatory Education and the Limits of Democratic Reform (Peter Lang, in press). "Racial identity, the apartheid state and the limits of political mobilization in South Africa: The case of the University of the Western Cape" (Identity: An International Journal of Theory and Research, in press). "Access to higher education" (Higher Education in the United States: An Encyclopedia, in press).



Gregory M. Anderson
Assistant Professor of Education

O. Roger Anderson

Professor of Natural Sciences and Chair of the Department of Mathematics, Science and Technology Department of Mathematics, Science and Technology 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*).

Darlyne Bailey

Vice President for Academic Affairs and Dean of the College; Professor of Psychology and Education
Department of Organization and Leadership
Professor of Social Work
Columbia University School of Social Work
A.B. Lafayette College; M.S.,
Columbia University; Ph.D.,
Case Western Reserve
University

SCHOLARLY INTERESTS: Leadership of communitybased organizations. Inter-organizational relations. Inter-professionalism.

SELECTED PUBLICATIONS: Strategic Alliances among Health and Human Services Organizations: From Affiliations to Consolidations (Sage Publications). Managing Human Resources in the Human Services (Oxford University Press). "Organizational change in a public school system: The synergism of two approaches" (Social Work in Education). "An integrative framework for the evaluation of community-based consortia" (Evaluation and Program Planning). "The contextual impact of social support among race and gender: Implications for African-American women in the workplace" (Journal of Black Studies).

Thomas R. Bailey

George and Abby O'Neill Professor of Economics and Education
Department of International and Transcultural Studies
A.B., Harvard University;
Ph.D., Massachusetts Institute of Technology

SCHOLARLY INTERESTS: Labor economics and education policy.

SELECTED PUBLICATIONS: Manufacturing Advantage: Why High Performance Systems Pay Off (Cornell University). The Double Helix of Education and the Economy (Institute for Education and the Economy, Teachers College). Employee Training and US Competitiveness: Lessons for the 1990's (Westview). Changes in the Nature and Structure of Work: Implications for Skills and Skill Formation (National Center for Education and Employment, Teachers College). Learning to Work: Employer Involvement in Schoolto-Work Transition Progress (Brookings Institution).

William J. Baldwin

Associate Dean of Teachers College and Associate Professor of Education

A.B., Villanova University; M.A., University of Toledo; Ed.M., Ed.D., Teachers College

SCHOLARLY INTERESTS: College and university administration. Financing higher education. Technology in higher education. Institutional research and planning.

Lesley Bartlett

Assistant Professor of Education
Department of International
and Transcultural Studies
B.A., University of North Carolina, Chapel Hill; Ph.D., University of North Carolina,
Chapel Hill

SCHOLARLY INTERESTS:
Comparative and international education, adult education, anthropology of education, social theory, social studies of language, literacy, and cognition, race and class formation, Latin America and the United States.

SELECTED PUBLICATIONS:
"Theorizing the Space of Literacy Practices: (Ways of Knowing, co-author). "Teaching Class:
Emotional Labor in Brazilian
Literacy Classes" (The Anthropology of Work Review). "The Marketization of Education: Public Schools for Private Ends"
(Anthropology and Education

Quarterly, co-author). "Disciplining Social Difference" (*The Urban Review*, co-author). "Making Soldiers in the Public Schools" (*American Friends Ser*vice Committee, co-author).

Angela Calabrese Barton

Associate Professor of Science Education

Department of Mathematics, Science, and Technology B.S., University of Notre Dame; Ph.D., Michigan State University

SCHOLARLY INTERESTS: Urban science education, qualitative research, feminist and critical theories and science education.

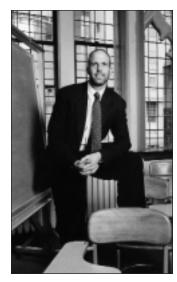
SELECTED PUBLICATIONS: Feminist science education (Teachers College Press). "Critical ethnography: Science education in urban settings: Seeking new ways of praxis through critical ethnography" (Journal of Research in Science Teaching). "Preservice teachers developing ideas of multicultural science education" (Journal of Curriculum Studies). "Examining the social and scientific roles of invention in science education" (Research in Science Education). "Teaching science with homeless children: Pedagogy, representation and identity" (Journal of Research in Science Teaching).

Charles E. Basch

Richard March Hoe Professor of Health Education and Chair of the Department of Health and Behavior Studies Department of Health and Behavior Studies 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 melli-



Charles E. Basch
Professor of Health Education

tus" (American Journal of Public Health). "Using the telephone as a medium for health education" (Health Education Quarterly). "Promoting the selection of low-fat milk in elementary school cafeterias in an innercity 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 M. Beebe

Professor of Linguistics and Education
Department of Arts and Humanities
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).

Ruth Michele Bereson

Assistant Professor of Practice in Arts Administration and Associate Director of the Program in Arts Administration
Department of Arts and Humanities
B.A., University of Melbourne;
Ph.D., The City University,
London

SCHOLARLY INTERESTS: Arts management. Arts policy. Cultural policy. Artistic integrity.

SELECTED PUBLICATIONS: The Operatic State: Cultural Policy and the Opera House (Routledge). Artistic Integrity and Social Responsibility: You Can't Please Everyone! (Ethos Books, ed.). "Arts and Cultural Policy in Singapore: 1957–2000" (The International Journal of Cultural Policy, in press).

John B. Black

Cleveland E. Dodge Professor of Telecommunications and Education Department of Human Development and Department of Math, Science and Technology. 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:

Cognition, Computing and Cooperation (Ablex). Knowledge Structures (LEA). "Analog imagery in mental reasoning; depictive models" (Cognitive Psychology). "Shuttling between depictive models and abstract rules" (Cognitive Science). "The development of cognitive skills to support inquiry learning" (Cognition and Instruction)



Caryn J. Block
Associate Professor of Psychology
and Education

Caryn J. Block

Associate Professor of Psychology and Education Department of Organization and Leadership B.S., University of Illinois; M.A., Ph.D., New York University

SCHOLARLY INTERESTS: Gender and racial issues in the workplace. Motivation and performance.

SELECTED PUBLICATIONS:
"Explaining racioethnic differences in job performance and related outcomes: An review of theoretical perspectives."
(Research in Organizational Behavior)."White racial identity and theory: A framework for understanding reactions toward interracial situations in organizations" (Journal of Vocational Behavior). "Presumed incompetent? Stigmatization and affir-

mative action efforts" (Journal of Applied Psychology). "White racial identity attitude theories: A rose by any other name is still a rose" (The Counseling Psychologist). "The affirmative action stigma of incompetence: Effects of performance information ambiguity" (Academy of Management Journal).

George A. Bonanno

Assistant Professor of Psychology and Education Department of Counseling and Clinical Psychology B.A., Hampshire College; Ph.D., Yale University

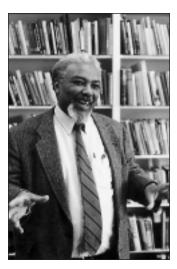
Scholarly Interests: Coping with grief and trauma. Emotion and emotion regulation. The adaptive consequences of self-deception.

SELECTED PUBLICATIONS: "When avoiding unpleasant emotions might not be such a bad thing: Verbal-autonomic response dissociation and midlife conjugal bereavement" (Journal of Personality and Social Psychology). "Facial expressions of emotion and the course of conjugal bereavement" (Journal of Abnormal Psychology). 'Toward an integrative perspective on bereavement" (Psychological Bulletin). "When children tell their friends they have AIDS: Possible consequences for psychological well-being and disease progression" (Psychosomatic Medicine).

George Clement Bond

William F. Russell Professor of Anthropology and Education Department of International and Transcultural Studies 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.



George Clement Bond
William F. Russell Professor of
Anthropology and Education

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 H. Borland

Associate Professor of Education and Chair of the Department of Curriculum and Teaching B.A., Johns Hopkins University; M.S., Clarion State College; Ph.D., Teachers College

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).

Judith Berman Brandenburg

Professor of Psychology and Education Department of Counseling and Clinical Psychology

Clinical Psychology
B.S., Cornell University;
M.A.T., Harvard University;
Ph.D., New York University

SCHOLARLY INTERESTS:
Gender issues in education,
workplace, and psychology. Psychology of the undergraduate.
Academic administration. Professional and ethical issues for
counselors. Sexual harassment.

SELECTED PUBLICATIONS:
Confronting Sexual Harassment:
What Schools and Colleges Can
Do (Teachers College Press).
Women and Men in Yale College:
Majors and Educational Aspirations (Yale University). "Sexual harassment: A challenge to schools of education" (American Association of Colleges for Teacher Education). "The needs of women returning to school" (Personal and Guidance Journal).

Marla R. Brassard

Associate Professor of Psychology and Education Department of Health and Behavior Studies B.A., Whitworth College; Ph.D., Teachers College

SCHOLARLY INTERESTS: Parent-child relations. Crime and violence in schools. Psychological maltreatment of children.



Marla R. Brassard
Associate Professor of Psychology
and Education

SELECTED PUBLICATIONS:
"Psychological Maltreatment"
(APSAC Handbook on Child
Maltreatment). "The Psychological Maltreatment Rating
Scales" (Child Abuse and
Neglect). "What can children
expect? Protecting and nurturing children in school and
community contexts" (School
Psychology Review).

Jeanne Brooks-Gunn

Virginia and Leonard Marx Professor of Child and Parent Development and Education
Department of Human
Development
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: "Why poverty matters for young children: Implications for Policy" (WAIMH Handbook of Infant Mental Health, co author). "Depending on the Kindness of Strangers: Current National Data Initiatives and Developmental Research" (Child Development, co-author). "Family Poverty, Welfare Reform and Child Development" (Child Development, coauthor). "Single mothers in low-wage jobs: Financial strain, parenting, and preschoolers' outcomes" (Child Development, co-author). "Horizontal and vertical management models for addressing behavior problems in Head Start centers" (Early Education and Development, co-author).

John M. Broughton

Associate Professor of Psychology and Education Department of Arts and Humanities 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 Cyberculture). "The experience of the father" (Insights). "Hollywood ultraviolence as educator" (Psychoanalysis and Education). "What the transgender child teaches us." (Bank Street College Occasional Papers).



W. Warner Burke Professor of Psychology and Education

W. Warner Burke

Professor of Psychology and Education
Department of Organization and Leadership
B.A., Furman University; M.A., Ph.D., University of Texas

SCHOLARLY INTERESTS: Organizational change. Leader and manager competencies. Self-awareness and performance.

SELECTED PUBLICATIONS:
Organization Development: A
Process of Learning and Change
(Addison-Wesley). Organization
Development: Principles and Practices (Harper Collins). "Leadership Development" (What
Works: Training and Development

Practices). "Organization change: What we know, what we need to know" (Journal of Management Inquiry). Business Climate Shifts (Butterworth Heineman).

Judith M. Burton

Professor of Art Education
Department of Arts and
Humanities
Academic Diploma, University
of London; M.Ed., University
of Manchester; Ed.D., Harvard
University

SCHOLARLY INTERESTS: Artistic-aesthetic development in children and adolescents. Gender bias in representation of subject matter. Aesthetic responses of adolescents to mature works of art. Role of artists in the education of children.

SELECTED PUBLICATIONS:
"Natural allies: Children,
teachers and artists" (Beyond
Enrichment, ACA). "The arts in
school reform: Other conversations" (Teachers College Record).
"Trends and issues in visual art
education curriculum" (Visual
Arts Resource Handbook). "Art
education and the plight of the
culture" (Art Education in the
United States of America,
Hochscule Der Kuenste).

Lucy McCormick Calkins

Professor of English Education
Department of Curriculum and Teaching
B.A., Williams College; M.A.,
University of Hartford; Ph.D.,
New York University

SCHOLARLY INTERESTS: Teaching of reading and writing. Reforming schools.

SELECTED PUBLICATIONS:
The Art of Teaching Reading
(Allyn & Bacon). The Art of
Teaching Writing (Heinemann).
Lessons From a Child (Heinemann). A Teacher's Guide to Standardized Reading Tests: Knowledge is Power (Heinemann). Raising
Lifelong Learners: A Parent's
Guide (Perseus). Living Between the Lines (Heinemann).

Robert T. Carter

Professor of Psychology and Education
Department of Counseling and Clinical Psychology
B.A., Columbia University;
Ed.M., Teachers College;
Ph.D., University of Maryland

SCHOLARLY INTERESTS: Multicultural education. Race and racial identity. Cross-cultural psychology. Career development. Gender issues. Psychotherapy process, race and legal issues as consultant-expert witness, as does diversity training and organization development.

SELECTED PUBLICATIONS: The Influence of Race and Racial Identity in Psychotherapy: Toward a racially inclusive model (Wiley). Racial Identity Theory: Applications to Individuals, Groups and Organizations (Earlbaum). Addressing cultural issues in organizations: Beyond the corporate context (Sage). Multicultural Counseling Competencies (Sage). "Racial identity and education" (Review of Research in Education). Multicultural Education, 2 volume issue (Teachers College Record, co-editor). "Reimagining race in education" (Teachers College Record).

Madhabi Chatterji

Associate Professor of Measurement, Evaluation, and Education Department of Human Development B.Sc., Lady Brabourne College, University of Calcutta (India); B.Ed., University of Bombay (India); M.Ed., Christopher's College, University of Madras (India); Ph.D., University of South Florida

SCHOLARLY INTERESTS: Program evaluation design. Survey methods. Instrument design and validation using classical and Rasch measurement models. Classroom assessment (traditional and performance assessments). SELECTED PUBLICATIONS:
"Designing and Using Tools for Educational Assessment"
(Allyn & Bacon). "Using and Iterative Model to Conceptualize, Pilot-test, and Validate a Teacher Measure of Reform Readiness" (Educational and Psychological Measurement, in press). "Models and Methods for Examining Standards-based Reforms and Accountability Initiatives" (Review of Educational Research, in press).

Peter T. Coleman

Assistant Professor of Psychology and Education and Director of International Center for Cooperation and Conflict Resolution (ICCCR)

Department of Organization and Leadership B.A., University of Iowa; Ph.D., Teachers College

SCHOLARLY INTERESTS:
Development of theory and intervention strategies that foster constructive social change and social justice.
Research in individual and social factors that facilitate the constructive use of social power; fostering ripeness in seemingly intractable conflict; conflict resolution training evaluation; and conflict resolution and difference.

SELECTED PUBLICATIONS: "The Mediation of Inter-ethnic Conflict in Schools" (Toward a Common Destiny: Improving Race and Ethnic Relations in America). "Redefining Ripeness: A Social-Psychological Perspective" (Peace and Conflict: Journal of Peace Psychology). "Introducing cooperation and conflict resolution into schools: A systems approach" (Peace, Conflict and Violence: Peace Psychology for the 21st Century). The Handbook of Constructive Conflict Resolution: Theory and Practice (Jossev-Bass). "Power and conflict" (The Handbook of Constructive Conflict Resolution: Theory and Practice. Jossev-Bass).

Lambros Comitas

Gardner Cowles Professor of Anthropology and Education Department of International and Transcultural Studies 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
1900–1975: 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). "Ethics in Anthropology: Dilemmas and Conundrums." (New York Academy of Sciences). With Ithaca on My Mind: An Anthropologist's Journey (Teachers College). "Ethnology: West Indies" (16 vols of Handbook of Latin American Studies).

Madonna G. Constantine

Associate Professor of Psychology and Education
Department of Counseling and Clinical Psychology
B.S., Xavier University of Louisiana; M.A., Xavier University of Louisiana; Ph.D., University of Memphis

SCHOLARLY INTERESTS: Multicultural issues in counseling, training, and supervision. Professional development issues, particularly issues concerning predoctoral internship training and people of color. Vocational and psychological issues of underserved populations.

SELECTED PUBLICATIONS: "Social desirability attitudes, sex, and affective and cognitive empathy as predictors of self-reported multicultural counseling competence" (The Counseling Psychologist). "Self-report multicultural counseling competence scales: Their relation to social desirability attitudes and multicultural case conceptualization ability" (Journal of Counseling Psychology).

Isobel Contento

Mary Swartz Rose Professor of Nutrition and Education Department of Health and Behavior Studies B.Sc., University of Edinburgh; M.A., Ph.D., University of California, Berkeley



Isobel Contento

Mary Swartz Rose Professor of

Nutrition and Education

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 educa-

tion 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).



Madonna G. Constantine
Associate Professor of Psychology and Education

Peter W. Cookson, Jr.

Associate Professor of Education and President of TC Innovations and the Doris Dillon Center Department of Organization and Leadership B.A., M.A., Ph.D., New York University, C.A.S, Harvard University

SCHOLARLY INTERESTS: Sociology of Education, Educational Reform, Educational Leadership, Change in Higher Education

SELECTED PUBLICATIONS: Expect Miracles: Charter Schools and the Politics of Hope and Despair (Westview Press/Perseus Books). "Diversity Within Unity: Essential Principals for Teaching and Learning in a Multicultural Society" (Phi Delta Kappan). "Fostering Moral Democracy" (Educational Leadership). Encyclopedia of the Sociology of Education, Co-ed (Garland Press). School Choice: The Struggle for the Soul of American Education (Yale University Press).

James E. Corter

Associate Professor of Statistics and Education and Chair of the Department of Human Development B.A., University of North Carolina; Ph.D., Stanford University



James E. Corter
Associate Professor of Statistics
and Education

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:
"An efficient metric combinatorial algorithm for fitting additive trees" (Multivariate Behavioral Research). Tree Models of Similarity and Association (Sage). "Using clustering methods to explore the structure of diagnostic tests" (Cognitively Diagnostic Assessment). "Explaining basic categories: Feature predictability and information" (Psychological Bulletin).

Margaret Smith Crocco

Associate Professor of Social Studies and Education Department of Arts and Humanities B.A., Georgetown University; Ph.D., University of Pennsylvania

SCHOLARLY INTERESTS: Diversity issues in social studies education. Citizenship education outside of schools. Technology and the social studies. Teacher education.

SELECTED PUBLICATIONS: "Bending the Future to Their Will": Civic Women, Social Education, and Democracy (Rowman and Littlefield). "Social Studies in the New York City Public Schools: A Descriptive Study" (Journal of Curriculum and Supervision). "Homophobic Hallways: Is Anyone Listening?" (Theory and Research in Social Education). "Inquiring Minds Want to Know: An Action Research Project in a New York City Classroom" (Journal of Teacher Education).

Lori A. Custodero

Assistant Professor of Music Education
Department of Arts and Humanities
Bachelor of Music, University of Redlands; M.A., California State University, Northridge; 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: "Seeking challenge, finding skill: Flow experience in music education" (Arts Education and Policy Review). "Music in the lives of children" (Zero-to-Three Bulletin). "Observing flow in young people's music learning" (General Music Today). "Music for everyone: Creating context of possibility in early childhood education" (Early Childhood Connections).

Leo-Paul Cyr

Assistant Professor of Art Education

Department of Arts and Humanities
B.E.E., B.A. University of
Moncton (Canada); M.A.A.E.
Nova Scotia College of Art and
Design (Canada); Ed.D. Teachers College

SCHOLARLY INTERESTS: The silent dialogue in making art. The role of things in artistic creation. The layering of experience while learning about a self/other relationship with the world.

SELECTED PUBLICATIONS:
"Art, Power and Access"
(NSCAD Papers in Art
Education). "Nurturing Development: Presence and Atmosphere for Learning" (The Canadian Society for Education Through Art Journal). "The Role of 'things' as Otherness to Self in Shaping Experience" (in press).



Lawrence T. DeCarlo
Assistant Professor of Psychology
and Education

Lawrence T. DeCarlo

Assistant Professor of Psychology and Education Department of Human Development B.A., SUNY, Stony Brook; M.A., Boston University; M.S., Columbia University; Ph.D., SUNY, Stony Brook

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:

"Signal detection theory with finite mixture distributions:
Theoretical developments with applications to recognition memory" (*Psychological Review*).

"A latent class extension of signal detection theory, with applications" (*Multivariate Behavioral Research*). "Signal detection theory and generalized linear models" (*Psychological Methods*). "On the meaning and use of kurtosis" (*Psychological Methods*).

Ronald E. DeMeersman

Professor of Applied Physiology and Education
Department of Biobehavioral Studies

B.S., M.S., University of Utah; Ph.D., Indiana University

SCHOLARLY INTERESTS: Modulators of autonomic outflow. Frequency domain analyses. Non-invasive 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 signal-processing 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).

Kevin J. Dougherty

Associate Professor of Higher Education and Senior Research Associate, Community College Research Center
Department of Organization and Leadership
B.A., Washington University;
M.A., Ph.D., Harvard
University.

SCHOLARLY INTERESTS: The community college. Higher education policymaking. Higher education finance. College students. K–12 educational reform. Sociology of education.

SELECTED PUBLICATIONS: The Contradictory College: The Conflicting Origins, Impacts and Futures of Community College (SUNY Press). "The evolving role of the community college: Policy issues and research questions" (Higher Education: Handbook of Theory and Research). "Educational organization" (The Encyclopedia of Sociology). "Community colleges and contract training" (Teachers College



Clea Fernandez

Assistant Professor of Psychology and Education

Record). "Mass higher education: What is its impetus? What is its impact?" (Teachers College Record). "Educational Organization" (The Encyclopedia of Sociology, co-author). "Opportunity to learn standards: A sociological critique" (Sociology of Education).

Barry A. Farber

Professor of Psychology and Education and Chair of Counseling and Clinical Psychology Department of Counseling and Clinical Psychology B.A., Queens College, CUNY; M.A., Teachers College; Ph.D., Yale University

Scholarly Interests: Psychotherapy research. Selfdisclosure. 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 Department of Human Development B.A., Barnard College; Ph.D., University of Chicago SCHOLARLY INTERESTS: The analysis of classroom processes with a special emphasis on cross-cultural comparisons. The psychology of learning from instruction and Teachers' theories of instruction and teacher development.

SELECTED PUBLICATIONS: "Japanese and American teachers' evaluations of mathematics lessons: A new technique for exploring beliefs" (Journal of Mathematical Behavior). "Cultures of mathematics instruction in Japanese and American elementary classrooms" (Teaching and Learning in Japan). "Traditions of school mathematics in Japanese and American elementary classrooms" (Theories of Mathematical Learning). "Learning mathematics from classroom instruction: On relating lessons to pupils' interpretations" (Journal of the Learning Sciences).

V.P. Franklin

Professor of History and Education
Department of Arts and
Humanities
B.A., Pennsylvania State
University; M.A.T., Harvard
University; Ph.D., University
of Chicago

SCHOLARLY INTERESTS: History of African American education. Urban educational history. Student culture and student activism.

SELECTED PUBLICATIONS: "My Soul Is A Witness": A Chronology of the Civil Rights Era, 1954–1965 (Henry Holt). Sisters in the Struggle: African American Women in the Civil Rights-Black Power Movement (New York University Press). Living Our Stories, Telling Our Truths: Autobiography and Making of the African-American Intellectual Tradition (Oxford University Press). The Education of Black Philadelphia: A Social and Educational History of a Minority Community, 1900-1950 (University of Pennsylvania Press). "Vindicating The Race: Contributions To The African-American Intellectual Tradition" (The Journal of Negro History).

Celia Genishi

Professor of Education
Department of Curriculum
and Teaching
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



Celia Genishi Professor of Education

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.).

Michele Genor

Assistant Professor of Education Department of Curriculum and Teaching B.A., M.A., University of St. Thomas; C.A.S., Harvard University; Ph.D., University of Wisconsin, Madison

SCHOLARLY INTERESTS:
Teacher education. Learning communities. Social theories of learning. Action research. Multicultural education. Urban schools. Professional development. School and University partnerships. Reflective practice. Supervision. Portfolios/Performance assessment.

SELECTED PUBLICATIONS:
The Island of Anyplace Teacher's
Guide: Supplemental Curriculum
Guide to the American Repertory
Theatre's Performance. "Exploring race: Teacher educators
bridge their personal and professional identities" (Multicultural Perspectives, in press).

Antoinette M. Gentile

Professor of Psychology and Education
Department of Biobehavioral Sciences
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: "Skill acquisition: action, movement and neuromotor processes" (Movement Sciences: Foundation for Rehabilitation in Physical Therapy, 2nd ed.). "The



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Professor of Psychology and Education

reaching movements of patients with Parkinson's disease under self-directed maximal speed and visually-cued conditions" (*Brain*). "Implicit and explicit processes during acquisition of functional skills" (*Scand. J. Occupational Therapy*).

Martha A. Gephart

Research Associate Professor of Education
Co-Director, J.M. Huber Institute for Learning in Organizations
Department of Organization and Leadership
A.B., 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.

SELECTED PUBLICATIONS:

"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 P. Ginsburg

Jacob H. Schiff Foundations Professor of Psychology and Education Department of Human Development B.A., Harvard University; M.S., Ph.D., University of North Carolina

SCHOLARLY INTERESTS: Intellectual development. Mathematics education. Testing and assessment.

SELECTED PUBLICATIONS:
Children's Arithmetic (Pro-Ed).
Piaget's Theory of Intellectual
Development (Prentice-Hall).
Entering the Child's Mind
(Cambridge). The Teacher's
Guide to Flexible Interviewing in
the Classroom: Learning What
Children Know About Math
(Allyn Bacon).

A. Lin Goodwin

Associate Professor of Education
Department of Curriculum
and Teaching
B.S., Central Connecticut State
University; M.A., Ed.M.,
Ed.D., Teachers College

SCHOLARLY INTERESTS: Teacher education for urban and multicultural contexts. Teacher beliefs. Equity education. Asian American educational experiences and identity development.



A. Lin Goodwin
Associate Professor of Education

SELECTED PUBLICATIONS:
"Teacher preparation and the education of immigrant children" (Education and Urban Society). "Honoring the ways of knowing" (Women's Educational Equity Act Digest). Assessment for Equality and Inclusion: Embracing All Our Children (Routledge). "Voices from the margins: Asian American teachers' experiences in the profession" (Teacher Education Yearbook V: Research on the Education of Our Nation's Teachers).

Andrew Gordon

Associate Professor of Movement Sciences and Education Department of Biobehavioral Sciences B.A., Hampshire College; M.S., Pennsylvania State University; Ph.D., Karolinska Institute; Postdoctoral Fellow, University of Minnesota.

Scholarly Interests: Neural control of movement. Motor learning and development. Movement disorders. Brain processes. Professional development and research training of therapists and clinical educators.

SELECTED PUBLICATIONS: "Impaired force coordination during object release in children with hemiplegic cerebral palsy" (Developmental Medicine and Child Neurology). "The effects of constraint induced therapy on hand function in children with hemiplegic cerebral palsy" (Pediatric Physical Therapy). "Specificity of internal representations underlying grasping" (Journal of Neurophysiology). "Development of hand motor control" (Handbook of Brain and Behavior in Human Development).



Peter Gordon
Associate Professor of Speech and
Language Pathology

Peter Gordon

Associate Professor of Speech and Language Pathology Department of Biobehavioral Studies B.A., University of Stirling (Scotland); 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.

SELECTED PUBLICATIONS: "Frequency effects and the representation status of regular inflections" (Journal of Memory and Language). "The acquisition and creolization of Condition C 'violations' of Kadiweu and Portuguese" (Cadernos de Estudos Linguisticos). "Are lions and tigers substitutes or associates? Evidence against slot filler accounts of children's early categorization" (Child Development). Learnability of the Chinese Dative Alternation (Cascadilla Press). "The truth-value judgment task" (Methods for Assessing Children's Syntax). "Red rats eater

exposes recursion in children's word formation" (*Cognition*).

R. Douglas Greer

Professor of Psychology and Education
Department of Health and Behavior Studies
B.M.E., M.M.E., Florida State University; Ph.D., University of Michigan

SCHOLARLY INTERESTS:
Comprehensive Application of Behavior Analysis to Schooling (CABAS®). Teaching operations for the acquisition of verbal behavior by students with language deficits. Research in the learn-unit as a natural fracture of teaching. Peer Conditioning of Reinforcement.

SELECTED PUBLICATIONS:
Designing Teaching Strategies:
A behavior analysis systems
approach (Academic Press, in
press). "The educational crisis"
(Social Problems in American Society and Solutions). "Is the learn
unit the fundamental measure
of pedagogy?" (The Behavior
Analyst). Voices for all children:
Advanced and comprehensive
applications of behavior analysis to
education (Academic Press).

George Gushue

Assistant Professor of Psychology and Education
Department of Counseling and Clinical Psychology
A.B., Fordham University;
M.Phil., Ph.D., 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: Lazarus in group psychotherapy: AIDS in the era of protease inhibitors (The Counseling Psychologist). Remembering race: White racial identity attitudes and two aspects of social memory (Journal of Counseling Psychology). School counselors' ethnic tolerance attitudes as predictors of their multicultural case conceptualization of an immigrant student (Journal of Counseling and Development).

Irving Hamer, Jr.

Professor of Practice in Education
Department of Organization
and Leadership
B.A., Ottawa University;
M.Ed., Ed.D., Harvard
University

SCHOLARLY INTERESTS: Closing the achievement gap. Integrating technology into the teaching and learning experience. The elimination of low-performing schools. Bilingual education.

SELECTED PUBLICATIONS:

Language in the Classroom
(Teachers College Press). "The large city high school" (NASSP Bulletin). "Admissions policy" (New York City High Schools).

Gregory W. Hamilton

Assistant Professor of English
Education
Department of Arts and
Humanities
B.A., Lewis and Clark College;
M.A., Ed.D., Teachers College

SCHOLARLY INTERESTS: Middle school readers and young adult literature. Classroom discourse. Curriculum and staff development. School reform. Teaching for diversity and social justice.

SELECTED PUBLICATIONS:
"Listening, Learning, and Talking It Through" (Becoming (Other) wise, in press). "Jack" (Rationales for Young Adult Literature). "Reading Jack" (English Education). "Making connections" (English Education). "Lessons from our past: History of English education" (New York City Association of Assistant Principals Supervision, English IV). "Professional educators" (Yahoo! Internet Life). "Mapping A History of Adolescence and

Literature for Adolescents" (*ALAN Review*). "Mapping a Teaching/Writing Life" (book chapter).

ZhaoHong Han

Assistant Professor of Language and Education
Department of Arts and Humanities
B.A., Central China Normal University; M.A., Moray
House Institute of Education,
University of Edinburgh;
Ph.D., Birkbeck College, University of London

SCHOLARLY INTERESTS: Second language learnability and teachability; comparative grammar; language typology; the interface of lexical semantics and syntax.

SELECTED PUBLICATIONS: "The persistence of the implicit influence of NL: The case of the pseudo-passive" (Applied Linguistics). "Error persistence: An empirical pedagogy" (Language Teaching Research). "A study of the impact of recasts on tense consistency in L2 output" (TESOL Quarterly). "Fine Tuning corrective feedback" (Foreign Language Annals).



ZhaoHong Han
Assistant Professor of Language
and Education



David T. Hansen

Professor of Philosophy and Education

David T. Hansen

Professor of Philosophy and
Education
Department of Arts and
Humanities
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).

Charles C. Harrington

Professor of Anthropology, Psychology and Education and Chair of the Department of Organization and Leadership A.B., Syracuse University; Ph.D., Harvard University SCHOLARLY INTERESTS:

SCHOLARLY INTERESTS:
Human development in social
and cultural contexts. The
study of resiliency, resistance,
invulnerability and success in
at-risk populations. Psychologi-

cal 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)

Barbara Hawkins

Associate Professor of Languages and Education
Department of Arts and Humanities
B.A., Holy Names College;
M.A., University of California,
Los Angeles; 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 language 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?

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 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 R. Henig

Professor of Political Science and Education

Department of Organization and Leadership

B.A. Cornell University

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: Neighborhood Mobilization: Redevelopment an Response (Rutgers). Public Policy and Federalism (St.



Barbara Hawkins
Associate Professor of Languages
and Education

Martins). Rethinking School Choice: Limits of the Market Metaphor (Princeton). Shrinking the State: The Political Underpinnings of Privatization (Cambridge). The Color of School Reform: Race, Politics and the Challenge of Urban Education (Princeton). Building Civic Capacity: The Politics of Reforming Urban Schools (Kansas).

Jay P. Heubert

Associate Professor of Education and Law
Department of Organization and Leadership
Adjunct Associate Professor of Law
Columbia Law School
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. High-stakes testing. Law and school reform. Interprofessional collaboration. Access of students with disabilities to the general curriculum.

SELECTED PUBLICATIONS: High Stakes: Testing for Tracking, Promotion, and Graduation (National Academy Press). Law, Lawyers and School Reform (Yale University Press). "Schools without rules? Charter Schools, Federal Disability Law, and the Paradoxes of Deregulation" (Harvard Civil Rights-Civil Liberties Law Review). "The more we get together: Improving collaboration between educators and their lawyers" (Harvard Educational Review).

Linda Hickson

Professor of Education
Department of Health and
Behavior Studies
B.A., College of New Rochelle;
M.A., Ph.D., George Peabody
College, Vanderbilt University

SCHOLARLY INTERESTS: Education of children and adults with mental retardation and autism. Cognitive, motivational, and emotional aspects of decision-making. Prevention of abuse and victimization. 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). "Decision-making and mental retardation" (International Review of Research in Mental Retardation). "A closer look at interpersonal decision-making 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). Mental Retardation: Foundations of Educational Programming (Allyn & Bacon).

Christopher R. Higgins

Assistant Professor of Philosophy and Education Department of Arts and Humanities B.A., Yale University; Ph.D., Teachers College

SCHOLARLY INTERESTS: The ethics of teaching. Liberal learning and its place in teacher education. Dialogue and the teacher-student relationship. Hermeneutics. Psychoanalytic perspectives on educational practice. Aesthetic education.

SELECTED PUBLICATIONS: "Gluck des Lehrers" ("The Flourishing of the Teacher") (Zeitschrift fur Padagogik). "From Reflect Practice to Practical Wisdom: Three Models of Liberal Teacher Education" (Philosophy of Education). "Educational philosophy as liberal teacher education: Charting a course beyond the dilemma of relevance" (Philosophy of Education). "Transference love from the couch to the classroom: A psychoanalytic perspective on the ethics of teacher-student romance" (Philosophy of Education).

Elaine Virginia Howes

Assistant Professor of Science Education Department of Mathematics, Science and Technology B.A., Oakland University Honors College; Ph.D., Michigan State University

SCHOLARLY INTERESTS: Feminist and culturally relevant pedagogy in science, environmental education, and teacher education. Qualitative research and teacher research.

SELECTED PUBLICATIONS: Connecting girls and science: Constructivism, feminism, and science education reform (Teachers College Press). "A feminist revisioning of infinity: Small speculations on a big subject" ((Post) Modern Science (Education): Proposition and Alternative Paths, co-author). "Visions of 'science for all' in the elementary classroom" (Teaching science in diverse settings: Marginalized discourses and classroom practice). "Developing research that attends to the 'all' in 'science for all': Response to Mary M.Atwater's critique" (Journal of Research in Science Teaching). "Connecting girls and science: A feminist teacher-researcher study of a high school prenatal testing unit" (Journal of Research in Science Teaching).

Luis A. Huerta

Assistant Professor of Education Department of Organization and Leadership B.A., University of California, Davis; M.A., California State University, Fresno; Ph.D., University of California, Berkeley.

SCHOLARLY INTERESTS: Education Policy. Decentralization in education. School choice. Privatization in education. School finance.

SELECTED PUBLICATIONS:
"The Loss of Public Accountability? A Home Schooling
Charter School in Rural California" (Inside Charter Schools:
The Paradox of Radical Decentralization). "An Empowering
Spirit is Not Enough: A

Latino Charter School Struggles Over Leadership" (Inside Charter Schools: The Paradox of Radical Decentralization).
"Straw Into Gold, Resources Into Results: Spinning out the Implications of the 'New' School Finance" (Policy Analysis for California Education).

Sharon Lynn Kagan

Virginia and Leonard Marx
Professor of Early Childhood and
Family Policy
Co-director, Center for Children &
Families

Department of Curriculum and Teaching

B.A., University of Michigan; M.A., Johns Hopkins University; Ed.D., Teachers College

SCHOLARLY INTERESTS:

Application of child and parent development research to the formation and implementation of public policies; the impact of institutions (family, childcare) on the development of low income children

SELECTED PUBLICATIONS: Leadership in early care and education (National Association for the Education of Young Children, co-ed.). Reinventing early care and education: A vision for a quality system (Jossey-Bass, coed.). Putting families first: America's family support movement and the challenge of change (Jossey-Bass, co-ed.). Integrating services for children and families (Yale University Press). The care and education of America's young children: Obstacles and opportunities (National Society for the Study of Education, 90th Yearbook, ed.). United we stand: Collaboration for childcare and early education services (Teachers College Press).

Pearl Rock Kane

The Klingenstein Family Chair for the Advancement of Independent School Education
Department of Organization and Leadership
B.A., City College of New York; M.A., Smith College;
Ed.D., Teachers College

SCHOLARLY INTERESTS: Independent schools. Private school governance. School choice and privatization. Professional development of teachers and administrators.

SELECTED PUBLICATIONS:
The Color of Excellence (in press).
Independent Schools, Independent
Thinkers (Jossey-Bass). The
First Year of Teaching: Real
World Stories from America's
Teachers (Walker). The Challenge in Trusteeship (Association
of Governing Boards). "Leadership at the Millennium" (Independent Schools).

Danielle Kaplan

Assistant Professor of Technology and Education
Department of Mathematics,
Science and Technology
B.F.A., Tisch School of the
Arts, New York University;
M.E.S., Yale University School of Forestry and Environmental
Studies; M.A., Ed.M., Ph.D.,
Teachers College

SCHOLARLY INTERESTS:
Distance Instructions/Learning,
Cognition and Reasoning,
Multimedia Development and
Evaluation, Learning and
Assessment via Technology/
Media, Media Literacy, Environmental Education, Arts
Education, Social Ecology and
Community Development

SELECTED PUBLICATIONS: "MLT: A database driven WWW Media Literacy Tool" (Proceedings of the World Conference on Educational Multimedia and Hypermedia, co-author). "Geographic Information Systems (GIS) and mental model reasoning about causal systems" (AERA, co-author). "Development and evaluation of a technology-supported map skills curriculum, Where are we?" (Journal of Geoscience Education, co-author). "Computerbased Tools for the Development and Investigation of Mental Model Reasoning about Causal Systems" (Proceedings of the World Conference on Educational Multimedia and Hypermedia, co-author). "The Development of Cognitive Skills to Support Inquiry Learning" (Journal of Cognition and Instruction, co-author).

Alexander P. Karp

Assistant Professor of Mathematics Education

Department of Mathematics, Science and Technology B.A., M.A., Leningrad State Pedagogical University; M.A., Ph.D., St. Petersburg State Pedagogical University

SCHOLARLY INTERESTS: Curriculum. Teacher Training. Student Achievement Level in Mathematics. Problem Solving. History of Mathematics Education.

SELECTED PUBLICATIONS: "Russian Schools for the Mathematically and Scientifically Talented: Can the Vision Survive Unchanged?" (Roeper Review. A Journal of Gifted Education, co-author). "The Preparation of Teachers for the Mathematically Gifted: An International Perspective" (NCSSSMST Journal, coauthor). Exams in Mathematics (secondary school)—Russian experience: Traditions, Changes, Difficulties. Regular Lecture at ICME-9 (The 9th International Congress On Mathematical Education). "Combining Russian and Western Approaches in Teaching Mathematics to Students of Humanities" (Proceedings of the Conference "Cultural Diversity in Mathematics (Education): CIEAEM 51").

Barbara Kiefer

Robinson Professor in Children's Literature

Department of Curriculum and Teaching

B.A., M.Ed., Westminister College; Ph.D., Ohio State University

SCHOLARLY INTERESTS: Children's literature, especially the use of picture-books in reading education. Reading language arts. Literacy education.

SELECTED PUBLICATIONS:
Children's Literature in the Elementary School, 7th Ed.
(McGraw Hill). The Potential of Picture-books: From Visual Literacy to Aesthetic Understanding (Prentice Hall). An Integrated Language Perspective in the Elementary School: Theory into Action, 3rd. Edition (Longman). "Picture-books as contexts for literary, aesthetic and real world understandings" (Language Arts).



Robinson Professor in Children's Literature



JoAnne Kleifgen
Associate Professor of Linguistics
and Education

JoAnne Kleifgen

Associate Professor of Linguistics and Education

Department of International and Transcultural Studies 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). "Achieving coherence in multilingual interaction" (Discourse Processes).

L. Lee Knefelkamp

Professor of Higher Education
Department of Organization
and Leadership
B.A., Macalester College;
M.A., Ph.D., University of
Minnesota

SCHOLARIY INTERESTS:
Undergraduate curriculum.
Curriculum transformation.
Theories of student development. The design of effective learning communities.
Women in higher education.
Feminist pedagogy, theory, and research. Intellectual and ethical development. Diversity in higher education.

SELECTED PUBLICATIONS: Workbook for the Practice-to-Theory 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 multi-cultural curriculum and communities of peace" (Liberal Education). "Education for a world lived in common with others" (Education and Democracy, College Board).

Michelle G. Knight

Assistant Professor of Education
Department of Curriculum and
Teaching

B.A., Franklin and Marshall College; M.A., Monterey Institute of International Studies; Ph.D., University of California, Los Angeles

SCHOLARLY INTERESTS:

Equity issues in urban education. Teacher education. Multicultural feminisms and feminist pedagogies. African-American teaching practices with diverse populations.

SELECTED PUBLICATIONS: "(In)(Di)Visible Identities of Youth: College preparation programs from a Feminist Standpoint" (SUNY Press). "Race, Class and Gender: Understanding experiences of intersectionality in the preparation of an African-



Michelle G. Knight
Assistant Professor of Education

American social justice educator" (Equity & Excellence in Education). "Ethics in qualitative research: Multicultural feminist activist research" (Theory into Practice). "Finding Our Way: Challenging Oppressive Educational and Societal Practices" (The Thought and Practice of Anti-Racist Teaching, Routledge). "The role of English in Anglophone Africa" (Monterey Review).

Robert E. Kretschmer

Associate Professor of Education and Psychology Department of Health and Behavior Studies 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 psycho-educational 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-as-

researchers: Supporting professional development" (Volta Review). "Multihandicapped, hearing impaired students as thinkers and 'feelers'" (Volta Review).

Deanna Kuhn

Professor of Psychology and
Education
Department of Human
Development
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:
"A developmental model of critical thinking" (Educational Researcher). The Skills of Argument (Cambridge University Press). "Children and adults as intuitive scientists" (Psychological Review). "Education for thinking: What can psychology contribute?" (Promoting Cognitive Growth Over the Life Span).

Leah B. Lapidus

Professor of Psychology and Education
Department of Counseling and Clinical Psychology
B.A., Ph.D., New York University; M.A., Teachers College

SCHOLARLY INTERESTS: Stress and coping. Trauma reduction. Child abuse identification, intervention, and prevention. Psychopathology and schizophrenia. Legal issues in diagnosis and treatment. Crosscultural mastery of parentchild intervention. Psychological differentiation and reduction of violence in families, schools, and the community. Impact of early social experience on brain function and psychophysiology in facilitation of adaptive coping.

SELECTED PUBLICATIONS:
"Cognitive control and reactions to stress: Conditions for mastery in the anticipatory phase" (Proceedings of the American Psychological Association).
"Anxiety, arousal, and schizophrenia: A theoretical integration" (Psychological Bulletin).
"Cross-cultural consistencies in prenatal perceptual patterns and prenatal practices" (International Journal of Prenatal and Prenatal Studies).

Young-Sun Lee

Assistant Professor of Psychology and Education Department of Human Development B.A., M.A., Ewha Womans University (South Korea); Ph.D., University of Wisconsin, Madison

SCHOLARLY INTERESTS: Educational and psychological measurement, Psychometric theory

SELECTED PUBLICATIONS: "Recovery of Item Parameters in the Nominal Response Model: A Comparison of Marginal Likelihood Estimation and Markov Chain Monte Carlo Estimation" (Applied Psychology Measurement, co-author, in press). "Longitudinal Graded response Model and Missing data in Educational Intervention" (co-author, in press). "A Comparison of Kernel Smoothing Estimation and Isotonic Regression Estimation in ICC estimation" (in press). "Applications of Isotonic Regression in Item Response Theory" (University of Wisconsin-Madison).

Hope Jensen Leichter

Elbenwood Professor of Education and Director of the Elbenwood Center for the Study of the Family as Educator Department of International and Transcultural Studies 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.

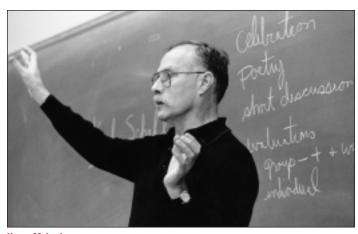
SELECTED PUBLICATIONS: "Stories are Learning" (The Museum as a Place of Learning, Cornell University). Kinship and Casework: Family Networks and Social Intervention (Russell Sage Foundation). Families and Communities as Educators (Teachers College Press). "The school and parents" (The Teachers Handbook). "The concept of educative style" (Teachers College Record). "Family contexts of television" (Educational Communication and Technology). "Families and museum" (Marriage and Family Review).

Nancy Lesko

Professor of Education
Department of Curriculum and Teaching
B.S., Georgetown University;
M.S., University of Wisconsin,
Madison; 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. Service-learning curricula.

SELECTED PUBLICATIONS: "Denaturalizing adolescence: The politics of contemporary representations" (Youth & 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). Reducing the Risk: Schools as Communities of Support (Falmer Press).



Henry M. Levin
William Heard Kilpatrick Professor of Economics and Education and Director,
National Center for the Study of Privatization in Education (NCSPE)

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William Heard Kilpatrick
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for the Study of Privatization in
Education (NCSPE)
Department of International
and Transcultural Studies
B.S., New York University;
M.A., Ph.D. (Economics), 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: Effectiveness, 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). "Raising school productivity: An X-Efficiency Approach" (Economics of Education).

Arthur E. Levine

President of Teachers College and Professor of Education B.A., Brandeis University; Ph.D., SUNY, Buffalo

SCHOLARLY INTERESTS: College students and multiculturalism. College and university leadership. Curriculum. History of higher education.

SELECTED PUBLICATIONS: When Hope and Fear Collide: A Portrait of Today's College Student (Jossey-Bass). Beating the Odds: How the Poor Get to College (Jossey-Bass). "How the Academic Profession is Changing" (Daedalus). When Dreams and Heroes Died: A Portrait of Today's College Students (Jossey-Bass).

Xiaodong Lin

Associate Professor of Technology and Education
Department of Math, Science, and Technology
B.A., Teachers College, HeNan University (China); M.A., Louisana State University; Ph.D., Purdue University

SCHOLARLY INTERESTS: Metacognition and problem solving. The ways that cultural interactions with the help of technology can facilitate domain subject understanding and personal reflection. How technology-rich learning envi-

ronments influence trans-cultural collaboration among teachers and students and their reflection.

SELECTED PUBLICATIONS: "Technology, culture and adaptive mind" (Mind, Culture & Activities, co-author, in press). "Reflection at the crossroad of cultures" (Mind, Culture & Activities, co author, in press). "Cross-cultural adaptation of educational technology" (CSCL2: Carrying Forward the Conversation). "Reflective adaptation of a technology artifact: A case study of classroom change" (Cognition & Instruction). "Designing metacognitive activities" (Educational Technology Research & Development).

Suniya S. Luthar

Professor of Psychology and Education
Department of Human
Development
B.Sc., M.Sc., Delhi University
(India); Ph.D., Yale University

SCHOLARLY INTERESTS: Developmental psychopathology and resilience among children and families at risk.

SELECTED PUBLICATIONS:

Poverty and children's adjustment
(Sage). "The construct of
resilience: A critical evaluation
and guidelines for future work"
(Child Development). Developmental Psychopathology: Perspectives
on adjustment, risk, and disorder
(Cambridge University Press).
"Relational Psychotherapy
Mothers' Group: A developmentally informed intervention
for at-risk mothers" (Development and Psychopathology).

Victoria J. Marsick

Professor of Education and Codirector, The J.M. Huber Institute for Learning in Organizations
Department of Organization and Leadership
B.A., Notre Dame University;
M.I.P.A., Maxwell School;
Ph.D., University of California,
Berkeley

SCHOLARLY INTERESTS: Informal workplace learning; team learning; action learning; strategic organizational learning and knowledge 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)

Susan Garni Masullo

Assistant Professor of Practice in Education
Department of Health & Behavior Studies
B.A., Thomas More College, Fordam University; M.A.,
Teachers College; Ph.D., Fordam University

Scholarly Interests: Reading assessment and intervention. Adult literacy; vocational and workplace literacy. Learning disabilities.

Robert O. McClintock

John L.and Sue Ann Weinberg
Chair in the Historical and Philosophical Foundations of Education
Department of Mathematics,
Science and Technology
A.B., Princeton University;
M.A., Columbia University;
Ph.D., Teachers College

Scholarly Interests: Applications of digital technology to educational reform. Interaction of political and educational theory. The city as educator.

SELECTED PUBLICATIONS: "Digital Learning Communities: Promoting Democracy through Education" (e-seminar, Columbia Interactive). *The*

Educators Manifesto: On the Social Construction of Digital Learning Communities (Institute for Learning Technologies) Power and Pedagogy: Transforming Education Through Information Technology (Institute for Learning Technologies).

Elizabeth Midlarsky

Professor of Psychology and Education Department of Counseling and

Clinical Psychology B.A., Brooklyn College, CUNY; M.A., Ph.D., Northwestern University

SCHOLARLY INTERESTS: Psychoeducational approaches to mental and physical health in siblings of children with disabilities, older adults, women and survivors of trauma. Altruism, helping and help-seeking, and sequelae of the Holocaust. Life span and aging issues. Sex roles. School Violence; socioemotional facets of development.

SELECTED PUBLICATIONS:
"Competence and adjustment among siblings of children with mental retardation"
(American Journal of Mental Retardation). Altruism in Later Life (Sage). "Altruism and the Vietnam War veteran" (Journal of Traumatic Stress). "Altruistic moral judgment among older adults" (Aging and Human Development). "Altruism through the life course" (Family Caregiving Across the



Elizabeth Midlarsky
Professor of Psychology and Education

Lifespan). "The generous elderly" (Psychology and Aging). "Competence, reticence and helping" (Developmental Psychology). "Echoes of the Holocaust" (International Journal of Group Tensions). "Perceptions of responsibility and mental health help-seeking" (Journal of Clinical Geropsychology).

Janet L. Miller

Professor of English Education
Department of Arts &
Humanities
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. Representation in qualitative research and writing. Issues in the writing of educational biography and autobiography.

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).

Lisa Miller

Assistant Professor of Psychology and Education Department of Counseling and Clinical Psychology 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 & Adolescent Psychiatry).



Dennis E. Mithaug

Professor of Education

Dennis E. Mithaug

Professor of Education
Department of Health and
Behavior Studies
B.A., Dartmouth College;
M.A., M.Ed., Ph.D., University of Washington

Scholarly Interests: Equal opportunity. Disabilities studies. Empirical, Moral and Policy Theories. Self-determination. Self-regulation. Social Policy. Special Education Leadership.

Selected Publications:
Self-Determined Learning Theory: Construction, Verification, and Evaluation (Earlbaum).
Learning to Theorize: A Four-Step Strategy (Sage). Inclusive Schooling: National and International Perspectives (Earlbaum).
Equal Opportunity Theory (Sage). Self-Regulation Theory: How Optimal Adjustment Maximizes Gain (Praeger).

Jane A. Monroe

Associate Professor of Statistics and Education Department of Human Development B.A., Midwestern University; M.S., University of Wisconsin, Madison; Ed.D., Teachers College

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).

Gary Natriello

Professor of Sociology and Education
Department of Human
Development
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: From Cashbox to Classroom: The Impact of the Quality Education Act in New Jersey (Teachers College Press). "The impact of evaluation processes on students" (Educational Psychologist). "The effectiveness of the Title I Compensatory Education Program: 1965–1997" (Journal of Education for Students Placed At Risk). "The development and impact of high stakes testing" (Harvard Civil Rights Project).

Anna Neumann

Professor of Higher Education
Department of Organization
and Leadership
B.A., University of TexasAustin; M.A., Pan American
University; Ph.D., University
of Michigan



Anna Neumann
Professor of Higher Education

SCHOLARLY INTERESTS:
Scholarly learning in lifespan
perspective. Professors and their
intellectual careers. Learning
and teaching in higher education. Women's scholarly development. Academic cultures.
Educational inquiry. The learning of research.

SELECTED PUBLICATIONS: "Learning the practice of educational research" (Issues in Education Research: Problems and Possibilities). "On experience, memory and knowing: A Post-Holocaust (auto) biography" (Curriculum Inquiry Learning From Our Lives: Women, Research, and Autobiography in Education (Teachers College Press). "Context, cognition and culture: A case analysis of collegiate leadership and cultural change" (American Educational Research Journal).

Debra A. Noumair

Associate Professor of Psychology and Education Department of Organization and Leadership B.S., Boston University; Ed.M., Ed.D., Teachers College

SCHOLARLY INTERESTS: Group and Organizational dynamics and the application of systems thinking to individual, team, and organizational performance; analysis of diversity issues in groups, organizations, and social systems. Power and authority relations. Influence of diversity, authority and identity on relationships at work. Gender issues.

SELECTED PUBLICATIONS: "The Multiplicity of Roles and Demands for the Leader as Partner" (The Leader as Partner, in press). "The Role of Personality Assessment in Organization Development" (Organization Development: A Process of Learning and Changing, Addison Wesley). "The Tiller of Authority in a Sea of Diversity: Empowerment, Disempowerment, and the Politics of Identity" (Dynamic Consultantation in a Changing Workplace, Psychosocial Press). "Clarence Thomas, Anita Hill and us: A group relations perspective" (Journal of Applied Behavior Science). "The tiller of authority in a sea of diversity: Empowerment, and Disempowerment, and the Politics of Identity" (New Paradigms of Leadership in the 21st Century: Diversity and Consultation).

Kathleen A. O'Connell

Isabel Maitland Stewart Professor of Nursing Education
Department of Health and Behavior Studies
B.S.N., College of Mount St.
Joseph-on-the-Ohio; M.A.,
Ph.D., University of Kansas

SCHOLARLY INTERESTS: Behavior change. Smoking cessation and relapse. Reversal theory. Theory of self-control strength.



Kathleen A. O'Connell

Isabel Maitland Stewart Professor of

Nursing Education

SELECTED PUBLICATIONS: "Highly tempting situations associated with abstinence, temporary lapse, and relapse among participants in smoking cessation programs" (Journal of Consulting and Clinical Psychology). "Reversal theory and smoking: a state-based approach to ex-smokers' highly tempting situations" (Journal of Consulting and Clinical Psychology). "Why rational people do irrational things: The theory of psychological reversals" (Journal of Psychosocial Nursing). "Coping in real time: Using ecological momentary assessment techniques to assess coping with the urge to smoke" (Research in Nursing and Health). "Playfulness, arousal-seeking, and rebelliousness during smoking cessation" (Personality and individual Differences).

Honor O'Malley

Associate Professor of Audiology
Department of Biobehavioral
Studies

B. A. Morrimount Manhattan

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).

Margaret Terry Orr

Associate Professor of Education Department of Organization and Leadership B.A., Denison University; M.A., Ed.M., Ph.D., Teachers College

SCHOLARLY INTERESTS: Leadership preparation. Problem solving and organizational change. Reforming secondary

change. Reforming secondary and post-secondary education connections. Evaluation and action research.

SELECTED PUBLICATIONS:

"Developing quality leaders-connecting the educational leadership crisis to leadership preparation programs" (in press). "Community colleges and their communities: collaboration for new workforce development" (The new vocationalism in American community colleges, New Directions for Community Colleges).

Cheri Ostroff

Associate Professor of Psychology and Education Department of Organization and Leadership B.A., University of Texas, Austin; M.A., Ph.D., Michigan State University

SCHOLARLY INTERESTS: Human resource management systems and firm performance. Levels of analysis issues. Person-organization fit. Socialization of newcomers. Selection. Training.

SELECTED PUBLICATIONS:
"Moving HR to a higher level:
Human resource practices and organizational effectiveness"
(Multilevel Theory, Research, and Methods in Organization, Jossey Bass). "Organizational culture and climate (Comprehensive Handbook of Psychology, Wiley). "Meta-analysis, level of analysis, and best estimates of population correlations: Cautions for interpreting meta-analytic results in organizational behavior" (Journal of Applied Psychol-

ogy). "Self-other agreement: Does it really matter?" (Personal Psychology). "The relationship between satisfaction, attitudes and performance: An organizational level analysis" (Journal of Applied Psychology).

Celia Oyler

Associate Professor of Education Department of Curriculum and Teaching

B.S., Southern Connecticut State College; M.Ed., University of Vermont; Ph.D., University of Illinois, Chicago

 ${\hbox{Scholarly Interests:}}$

Classroom-based collaborative research on issues of social justice, equity, and accessible pedagogy. Inclusion of students with disabilities in general education classrooms.

SELECTED PUBLICATIONS: Making room for students: Sharing teacher authority in Room 104 (Teachers College Press). "Teaching beyond the progressive-traditional dichotomy: Sharing authority and sharing vulnerability" (Curriculum Inquiry). "Sharing authority: Student initiations during teacher-led read-alouds of information books" (Teaching and Teacher Education). "Us and them: Finding irony in our teaching methods" (Journal of Curriculum Studies). Silenced gender: The construction of a male primary educator (Teaching and Teacher Education). Extending narrative inquiry (Curriculum Inquiry). Integrated curriculum and service learning: Linking school-based knowledge and social action (English Education).

Aaron Pallas

Professor of Sociology and
Education
Department of Human
Development
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:
"Rites and wrongs: Institutional explanation for the course scheduling in urban high schools" (American Journal of Education). Research in Sociology of Education and Socialization (JAI Press). "The effects of schooling on individual lives" (Handbook of Sociology and Education).

Rupal Patel

Assistant Professor of Speech and Language Pathology Department of Biobehavioral Studies B.Sc., University of Calgary; M.H.Sc., Ph.D., University of Toronto

SCHOLARLY INTERESTS: Alternative and augmentative communication. Multimodal assistive technology. Acoustics and prosody of motor speech disorders.

SELECTED PUBLICATIONS:
"Phonatory control in adults with cerebral palsy and severe dysarthria" (Alternative and Augmentative Communication, in press). "Prosodic control on severe dysarthria: preserved ability to mark the question-statement contrast" (Journal of Speech Language and Hearing



Rupal Patel
Assistant Professor of Speech and
Language Pathology

Research, in press). "Rethinking sentence formulation in AAC" (American Speech and Hearing Association, Special Interest Group in Augmentative and Alternative Communication).

Dolores Perin

Associate Professor of Psychology and Education Department of Health and Behavior Studies B.A., Ph.D., University of Sussex

SCHOLARLY INTERESTS: Reading and writing disabilities in children and adults. Curriculum and pedagogy in community colleges. Adult and workplace literacy.

SELECTED PUBLICATIONS: "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). "Promising approaches for remediation" (Community College Journal). "Professionalizing adult literacy: Would a credential help?" (Journal of Adolescent and Adult Literacy). "Workplace literacy assessment" (Dyslexia). "Assessing the reading-writing relation in adult literacy students" (Reading Psychology).

Elissa L. Perry

Assistant Professor of Psychology and Education
Department of Organization and Leadership
B.S., Trinity College; M.S., Ph.D., Carnegie Mellon
University



Dolores Perin
Associate Professor of Psychology
and Education

SCHOLARLY INTERESTS: The role of personal characteristics (e.g., age, gender, disability) in human resource judgments and organizational behavior. Specifically, age discrimination and sexual harassment issues in organizations. Organizational efforts (e.g., training) to address sexual harassment and manage diversity.

SELECTED PUBLICATIONS: "Ironic evaluation processes: Effects of thought suppression on evaluations of older job applicants" (Journal of Organizational Behavior). "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). "Explaining gender-based selection decisions: A synthesis of contextual and cognitive approaches" (Academy of Management Review). "Individual differences in the effectiveness of sexual harassment awareness training" (Journal of Applied Social Psychology).

Lisa A. Petrides

Assistant Professor of Education Department of Organization and Leadership B.S., University of California; M.B.A., Sonoma State University; Ph.D., Stanford University

SCHOLARLY INTERESTS: Management systems and information technology. Information systems and decisionmaking in higher education. Organizational Learning. Access and equity.

SELECTED PUBLICATIONS: "Organizational Learning and the Case for Knowledge-Based Systems" (New Directions in Institutional Research, in press, Jossey Bass). "Web-based technologies for distributed (or distance) learning: Creating learning-centered educational experiences in the higher education classroom" (International Journal of Instructional Media, in press). "The Internet and higher education" (Higher Education in the United States: An Encyclopedia, in press). Case Studies of Information Technology in Higher Education: Implications for Policy and Practice (Hershey, ed.). "The Politics of Information" (Case Studies of Information Technology in Higher Education: Implications for Policy and Practice, ed.). "Higher education and professional preparation" (The Encyclopedia of Third World Women). "A gendered construction of engineering in the academic context in science coeducation: Viewpoint from gender, race and ethnic perspectives" (National Association of Research in Science Teaching).

Stephen T. Peverly

Associate Professor of Psychology and Education Department of Health and Behavior Studies B.A., Manhattan College; M.S., Ed.S., SUNY, Albany; Ph.D., Pennsylvania State University

SCHOLARLY INTERESTS: Cognition and instruction, studying, memory. SELECTED PUBLICATIONS:

"The contribution of reading comprehension ability and metacognitive control to the development of studying adolescence" (Journal of Research in Reading, co-author, in press). "American and Chinese children's understanding of distance, time and speed interrelations" (Cognitive Development). "The effect of adjunct questions and feedback on improving the reading comprehension of learning disabled adolescents" (Contemporary Educational Psychology). "Curriculum based assessment of reading skills" (Psychology in the Schools). "An overview of the potential impact of cognitive psychology on school psychology" (School Psychology Review).

Lenore Pogonowski

Associate Professor of Music Education
Department of Arts and Humanities
B.S., Western Connecticut
State University; M.A., University of Connecticut;
D.M.A., Temple University

SCHOLARLY INTERESTS:
Development of musicality.
Musical creativity and problem solving. Metacognition. Interdisciplinary arts education.



Lenore Pogonowski
Associate Professor of
Music Education

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 process-oriented 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" (Iournal of Aesthetic Education). "Experience, critical thinking and problem solving in music teacher preparation" (Music Educators Journal). "The role of context in teaching and learning music" (Dimensions of Teaching and Learning Music).

James E. Purpura

Associate Professor of Language and Education, Director of TESOL Program
Department of Arts and Humanities
B.A., Marietta College; M.A., University of Colorado; Ph.D., University of California, Los Angeles

SCHOLARLY INTERESTS: Second language assessment; SL acquisition theory; and Syntactic and Conversational analysis. Effects of socio-psychological background characteristics on SL performance.

SELECTED PUBLICATIONS: Assessing Grammar (Cambridge University Press, in press). Strategy Use and Second Language Test Performance (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). "A Review of Bialystok's Communication Strategies" (Issues in Applied Linguistics).

Patricia M. Raskin

Associate Professor of Psychology and Education Department of Organization and Leadership B.S., M.Ed., Pennsylvania State University; Ph.D., New York University

SCHOLARLY INTERESTS: Career development of women. Identity. Work/family issues.

SELECTED PUBLICATIONS:
Vocational Counseling (coauthor). The Psychotherapy of Carl Rogers: Cases and Commentary (Guilford). "The relationship between coping styles, attachments and career salience in partnered working women with children" (Journal of Career Assessment). "Career maturity: The construct's validity, vitality, and viability" (Career Development Quarterly).

Susan L. Recchia

Associate Professor of Education
Department of Curriculum
and Teaching
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: profiles of personal and professional development" (Journal of Research in Childhood Education).
"Meeting the needs of young children with disabilities in child care" (Early Childhood Education Journal). "Social communication and response to ambiguous stimuli in toddlers with visual impairments" (Journal of Applied Developmental Psychology). "Establishing inter-

subjective experience: Developmental challenges for young children with congenital blindness and autism and their caregivers" (Blindness and Psychological Development in Young Children). "The issue of Multiple Pathways in the development of handicapped children" (Issues in the Developmental Approach to Mental Retardation).



D. Kim Reid Professor of Education

D. Kim Reid

Professor of Education
Department of Curriculum
and Teaching
B.A., Montclair State University; M. Ed., Temple University; Ph.D., Temple University

Scholarly Interests: Sociohistorical construction of disability; inclusive instruction; classroom discourse.

SELECTED PUBLICATIONS:

Language development, differences, and disorders: A perspective for general and special education teachers and classroom-based speech language pathologists (PRO-ED). "La colaboración en el aula como medio dy ayuda a los alumnos con dificultades de apredizaje del languaje" (Ediciones Pirámide).

Craig E. Richards

Professor of Education
Department of Organization
and Leadership
B.S., University of Wisconsin,
Green Bay; M.S., University of
Wisconsin, Milwaukee; M.A.,
Ph.D., Stanford University

Scholarly Interests: School finance. Institutional incentives. Market approaches to education. Performance accountability systems. Strategic management and organizational learning concepts.

SELECTED PUBLICATIONS: Risky Business: Private Management of Public Schools (Economic Policy Institute). Rethinking Effective Schools (Prentice-Hall). Microcomputer Applications for Strategic Management in Education: A Case Study Approach (Longman).

Elaine L. Rigolosi

Professor of Nursing Education
Department of Organization
and Leadership
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. Empathy.

SELECTED PUBLICATIONS:
The Empathy Construct Rating
Scale (Consulting Psychology
Press). The LaMonica Empathy
Profile (Consulting Psychology
Press). Management in Health
Care: A Theoretical and Experiential Approach (Macmillan).
Management in Nursing: An
Experiential Approach that Makes
Theory Work for You (Springer).

Francisco L. Rivera-Batiz

Professor of Economics and
Education
Department of International
and Transcultural Studies
A.B., Cornell University;
Ph.D., Massachusetts Institute
of Technology

SCHOLARLY INTERESTS: Education and economic development. Ethnicity and gender in the labor market. Immigrants and education. The Latino population of the United States.

SELECTED PUBLICATIONS:
Tigers in Distress: The Political
Economy of the East Asian Crisis
(Edward Elgar Publishers).
Island Paradox: Puerto Rico in
the 1990s (Russell Sage Foundation). Reinventing Urban Education: Multiculturalism and the
Social Context of Schooling
(IUME Press). "Undocumented
workers in the labor market:
Illegal Mexican immigrants in
the United States" (Journal of
Population Economics).

Janice S. Robinson

Special Counsel to the President,
Office of the President—Diversity
and Community
Assistant Professor of Higher
Education
Interim Ombudsperson
Department of Organization
and Leadership
B.S., Bridgeport University;
M.A., Ed.M., Teachers College;
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-author, in press). "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).

Anne Sabatini

Assistant Professor of Practice in Education

Department of Curriculum and Teaching

B.A., College of Mount St. Vincent; M.S., Hunter College; M.S., Pace University; Ed.D., Teachers College

SCHOLARLY INTERESTS: Professional development of teachers. Teacher education. Teacher retention. Equity. Qualitative methodologies.

SELECTED PUBLICATIONS: School-based Collaborative Decision Making at a New York City Comprehensive Public High School (Bell & Howell). "What keeps beginning teachers of Latino and African-American heritage teaching in inner city New York public schools?" (A Resource for Teacher Educators, Teachers College). "Monitoring and assessing a collaborative teaching internship: A case of responsive evaluation" (Texas A&M University). "Skillbuilding activities for elementary school children" (Science: It's A Changing World, National Geographic World). "Problem solving and enrichment lessons" (Elementary School Mathematics, Grade Five and Grade Six).

John Saxman

Professor of Speech and Language Pathology and Chair of the Department of Biobehavioral Studies

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
Department of Curriculum and Teaching
B.A., University of Washington; M.A., George Peabody
College for Teachers,
Vanderbilt University; Ed.D.,
Teachers College

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, in press). Learning to Teach: Preparing, Supporting, and Sustaining Deliberative Teachers (Teachers College Press). Growing Up Caring: Exploring Values and Decision-Making (McGraw Hill). "Curriculum implementation" (AERA Handbook on Research on Curriculum). "Promise and possibility: Learning to teach" (Teachers College Record). Curriculum making, models, practics and issues: A knowledge fetish? (100th Yearbook of the National Society for the Study of Education, University of Chicago Press).

Keith Sheppard

Assistant Professor of Science Education Department of Mathematics,

Science and Technology B.Sc., Liverpool University; P.G.C.E., Christ's College, Liverpool University; Ed.D., Teachers College

Scholarly Interests: Student scientific understanding and conceptual change learning. The role of computers and technology in science and science teacher education.

SELECTED PUBLICATIONS: "Index of Refraction: Teacher Kit" (*Scientific American*).

Dorothy Shipps

Assistant Professor of Education Department of Organization and Leadership B.A., University of California; M.A., University of California; Ph.D., Stanford University

SCHOLARLY INTERESTS: History and politics of urban school reform. Private interests in school governance. Civic capacity and educational change; policy analysis.

SELECTED PUBLICATIONS: "The Businessman's Educator: Mayoral Takeover and Non-traditional Leadership in Chicago" (Powerful Reforms with Shallow Roots: Getting Good School in Six Cities, Teachers College Press). Reconstructing the Common Good in Education: Coping with Intractable American Dilemmas (Co-Auth, Stanford University Press). "The politics of urban school reform: Legitimacy, city growth and school improvement in Chicago" (Educational Policy). "Corporate involvement in school reform" (Changing Urban Education). "The Invisible Hand: Big Business and Chicago School Reform" (Teachers College Record).

Marjorie Siegel

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University

SCHOLARLY INTERESTS: Reading in mathematics classrooms. Cultural and critical perspectives on literacy education. Literacy and the arts.

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 J. Silverman

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Behavior Studies
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: "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).



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Thomas Sobol

Christian A. Johnson Professor of Outstanding Educational Practice Department of Organization and Leadership A.B., Harvard College; A.M. in Teaching, Harvard Graduate School of Education; Ed.D., Teachers College

SCHOLARLY INTERESTS: Education policy. Elementary and secondary education reform. Public school governance and finance. The development of reflective education practitioners.

SELECTED PUBLICATIONS: Your Child in School (Arbor House). "Revising the New York State Social Studies Curriculum" (Teachers College Record). Teaching in Cities (Whitbread PLC). "Beyond standards: The rest of the agenda" (Teachers College Record).

Gita Steiner-Khamsi

Associate Professor of Education Department of International and Transcultural Studies B.A., M.A., Ph.D., University of Zurich

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: New Paradigms and Recurring Paradoxes in Education for Citizenship: An International Comparison. (Elsevier Science, coed.). Multicultural Educational Policies in Postmodern Societies (Leske & Budrich). "Transferring education, displacing reform" (Comparative Studies Series). "Minority-inclusive history curricula in secondary schools: Adopting methods of comparison and multiperspectivity" (European Journal of Intercultural Studies).

Derald Wing Sue

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SCHOLARLY INTERESTS: Multicultural counseling and psychotherapy. Psychology of racism and antiracism. Cultural diversity. Cultural competence. Multicultural organizational development.

SELECTED PUBLICATIONS: Understanding Abnormal Behavior (Houghton Mifflin). "The diversification of psychology: A multicultural revolution" (American Psychologist). Counseling the Culturally Different: Theory and Practice (Wiley). "The changing face of work in the United States: Implications for individual, institutional and societal survival" (Cultural Diversity and Mental Health). Multicultural Counseling Competencies: Individual, Professional and Organizational Development (Sage).

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Ohio State University; Ph.D.
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SCHOLARLY INTERESTS: Cognition and artistic practice and research methods for arts disciplines.

SELECTED PUBLICATIONS:
Seeing Australia: Views of Artists and Artwriters (Piper Press).
"Artistic thinking as transcognitive practice: A reconciliation of the process-product dichotomy" (Visual Arts Research). "Critical interpretive inquiry: A qualitative study of five contemporary artists' ways of seeing" (Studies in Art Education). Critical Influence: Interactive CD-ROM (University of New South Wales).

Patricia Sweeting

Associate Professor of Practice in Speech and Language Pathology Department of Biobehavioral Science

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SCHOLARLY INTERESTS: Voice Disorders. Speech across the Life Span. Clinical Education.

Robert P. Taylor

Associate Professor of Computing and Education
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College

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



Robert P. Taylor

Associate Professor of Computing and Education

and Teacher Education). "Educational problems and solutions incorporating technology" (Memorias: Il Congresso Colobiano de Informatica Educativa).

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Stephen J. Thornton

Associate Professor of Social Studies and Education Department of Arts and Humanities B.A., M.A., University of Newcastle (Australia); Diploma of Education, Mitchell College (Australia); A.M., Ph.D., Stanford University

SCHOLARLY INTERESTS: Social studies education. Curriculum and teacher education. The study of history and geography.

SELECTED PUBLICATIONS: "Subject Specific Teaching Methods: History" (Subject-specific Instructional Methods and Activities). "Legitimacy in the social studies curriculum" (Education Across a Century: The Centennial Volume, 100th Yearbook of the National Society for the Study of Education, Part 1). "From Content to Subject Matter" (The Social Studies). "Social Studies in the New York City Public Schools: A Descriptive Study," (Journal of Curriculum and Supervision, in press).

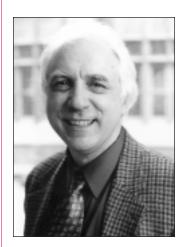
Maria Emilia Torres-Guzman

Associate Professor of Bilingual Education

Department of International and Transcultural Studies 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: "Multicultural Education, Part II & I" (Teachers College Record). "Stand & deliver: Student voices about teaching" (Puerto Rican Voices). "Stories about differences in a collaborative with middle school students" (Theory into Practice). "Language, culture and literacy in Puerto Rican communities" (Literacy in Diverse Communities). "Recasting frames: Latino parent involvement" (Policy and Practice in Bilingual Education: Extending the Foundations). "Language minorities: Moving from the periphery to the center?" (Educational Forum).



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Department of International and Transcultural Studies 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 Republic of China" (book chapter, Teachers College Press). Economic analysis of education policy (Education Science Press.)

Hervé Varenne

Professor of Education and Chair of the Department of International and Transcultural Studies License-ès-Lettres, Université d'Aix-Marseille; M.A., Ph.D., University of Chicago

SCHOLARLY INTERESTS: Culture and communication theory. Comparative study of education in and out of school. Family structure.

SELECTED PUBLICATIONS:
Ambiguous Harmony (Ablex).
American School Language (Irvington). Americans Together
(Teachers College Press). Successful Failure (Westview). Symbolizing America (Nebraska).

Frances K. Vavrus

Assistant Professor of Education Department of International and Transcultural Studies B.A., Purdue University; M.A., University of Illinois, Urbana-Champaign; 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: "Governmentality in an era of 'empowerment': The case of Tanzania" (Educational Knowledge: Changing Relationships between the State, Civil Society, and the Educational Community). "Gender and educational research, policy, and practice in Sub-Saharan Africa: Theoretical and empirical problems" (Women and Education in Sub-Saharan Africa: Power, Opportunities, and Constraints). "Making distinctions: privatization and the (un) educated girl on Mount Kilimanjaro, Tanzania (International Journal of Educational Development, in press).



Frances K. Vavrus
Assistant Professor of Education

Ruth Vinz

Enid and Lester Morse Chair in Teacher Education B.S., Montana State University; M.A., Boise State University; Ph.D., New York University

SCHOLARLY INTERESTS:
Constructions of classroom literacies in urban classrooms.
Teacher Preparation. Culturally Responsive Teaching. Teachers' Perspectives on School Reform. (Re) presenting Research in Writing.

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). "Cautions against canonizing (an) other literature" (Becoming (Other) Wise: Critical perspectives on reading literature, Calendar Island).

Bruce R. Vogeli

Clifford Brewster Upton Professor of Mathematical Education
Department of Mathematics,
Science and Technology
B.S., Mount Union College;
A.M., Kent Sate University;
Ph.D., University of Michigan

SCHOLARLY INTERESTS: International and comparative mathematics education. Education of the mathematically gifted. Curriculum development and evaluation.

SELECTED PUBLICATIONS: SBG Mathematics 2001 (sixbook 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).



Cally L. Waite
Assistant Professor of History
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Cally L. Waite

Assistant Professor of History and Education
Department of Arts and Humanities
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Stanford University; Ed.D.,
Harvard University

SCHOLARLY INTERESTS: The transformation of higher education in the late 19th century; education for African Americans in the north during the 19th century; historical theory and methodology.

SELECTED PUBLICATIONS:

Permission to Remain Among Us:
The Limits of Intergration at
Oberlin, 1880–1914 (Greenwood Press). "The Invisible
"Talented Tenth', Women and
Dubois" (Feminist Engagements).
"Segregation of black students
at Oberlin College after reconstruction" (History of Education
Quarterly).

Erica Walker

Assistant Professor of Mathematics and Education
Department of Mathematics,
Science, and Technology
B.S., Birmingham-Southern
College; M.A., Wake Forest
University; 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)

Barbara C. Wallace

Associate Professor of Health Education Department of Health and Behavior Studies A.B., Princeton University; M.A., Ph.D., City University of New York

SCHOLARLY INTERESTS:
Diversity training for multicultural competence. Invisible, covert and visible overt violence. Primary, secondary and tertiary violence prevention in school- and community-based settings. Domestic violence. Addictions and dependencies, especially to crack and cocaine. Drug abuse and HIV/AIDS. Health promotion in multicultural settings. Global health.

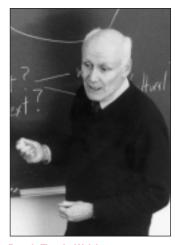
SELECTED PUBLICATIONS:

A Multicultural Approach to
Understanding and Dealing With
Violence: A Handbook for Psychologists and Educators (Sage Publications). Adult Children of Dysfunctional Families: Prevention,
Intervention and Treatment for
Community Health Promotion
(Praeger). Crack Cocaine: A
Practical Treatment Approach for
the Chemically Dependent (Brunner/Mazel). The Chemically
Dependent: Phases of Treatment
and Recovery (Brunner/Mazel).

Francis Timothy Walsh

Assistant Professor of Practice in Languages and Education
Department of Arts & Humanities
B.A., Colgate University;
M.F.A., University of Pennsylvania; M.A., San Francisco
State University; Ph.D., New York University

SCHOLARLY INTERESTS: TESOL and bilingual teacher knowledge development. Action research in TESOL teacher education. Second language literacy and aesthetic education.



Francis Timothy Walsh Assistant Professor of Practice in Languages and Education

SELECTED PUBLICATIONS: "Bilingual teachers as action researchers" (ERIC Clearinghouse). "A mathematics curriculum for Vocational English As a Second Language (VESL)" (Bilingual Education Training and Assistance Center). "Chapter 4: Literacy for amnesty applicants" (Legalization Phase II, Applying for Permanent). "What's in a name?" (The ESL Literacy Bulletin). "Using student generated photos in ESL literacy" (The ESL Literacy Bulletin).

Amy Stuart Wells

Professor of Sociology and Education
Department of Human
Development
B.A., Southern Methodist University; M.S., Boston University; Ph.D., Teachers College

SCHOLARLY INTERESTS: Educational policy. Race and education. Charter schools. School desegregation. School choice policy.

SELECTED PUBLICATIONS:
"The politics of accountability:
California School Districts and charter school reform" (*The Stanford Law and Policy Review*).
"Diversity and Inequality:

Montera Charter High School" (Charter Schools and the Paradox of Radical Decentralization). Where Charter School Policy Fails: Issues of Accountability and Equity. (Teachers College Press). Stepping Over the Color Line: African-American Students in White Suburban Schools. (Yale University Press, co-author).

James D. Westaby

Assistant Professor of Psychology and Education Department of Organization and Leadership B.A., University of Wisconsin; Ph.D., University of Illinois

SCHOLARLY INTERESTS: Work attitudes, employee development, and human resource management

SELECTED PUBLICATIONS: "Identifying specific factors underlying attitudes toward change: Using multiple methods to compare Expectancy-Value Theory to Reasons Theory" (Journal of Applied Social *Psychology*). "Presence of others and task performance in Japan and the United States: A Laboratory Investigation" (International Journal of Psychology). "Self-reported reasons: A test and application of Reasons Theory on occupational behavior" (Basic and Applied Social Psychology).

Joanna P. Williams

Professor of Psychology and Education
Department of Human
Development
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 R. Williams

Professor of Education
Department of Curriculum
and Teaching
B.A., Wellesley College;
M.A.T., Harvard University;
Ed.D., Teachers College

SCHOLARLY INTERESTS: Early childhood education. Multicultural education. Curriculum/program development and implementation. History of early childhood education.

SELECTED PUBLICATIONS:
Kaleidoscope: A Multicultural
Approach for the Primary School
Classroom (Prentice-Hall, coauthor). Encyclopedia of Early
Childhood Education (Garland).
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 L. Wolf Research Assistant Professor of Health Education

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Research Assistant Professor of Health Education Department of Health and Behavior Studies 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).

Christine J. Yeh

Assistant Professor of Psychology and Education
Department of Counseling and Clinical Psychology
B.A., Swarthmore College;
Ed.M., Harvard University;
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SCHOLARLY INTERESTS: Cultural conceptualizations of self, coping, and mental health. Cross-cultural school counseling.

SELECTED PUBLICATIONS:

"Interdependence in ethnic identity and self: Implications for theory and practice" (Journal of Counseling and Development). "Asian-American coping styles and help seeking attitudes: A comparison of within group differences" (Journal of College Student Development).

"The collectivistic nature of ethnic identity development among Asian-American college students" (Adolescence).

Lyle Yorks

Associate Professor of Adult and Continuing Education
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B.A. Tusculum College; M.A. Vanderbilt University; M.A., Ed.D. Columbia University

SCHOLARLY INTERESTS:
Action Learning. Collaborative
Inquiry. Qualitative Research
Methods. Strategic
Approaches to Human
Resource Development.

SELECTED PUBLICATIONS: "Toward a Theory and Practice for Whole-Person Learning: Reconceptualizing Experience and the Role of Affect." (Adult Education Quarterly). Collaborative Inquiry in Practice: Action Reflection and Meaning Making (Sage). "Action learning: Successful strategies for individual, team, and organizational development" (Advances in Developing Human Resources). "Hawthorne, Topeka, and the issue of science versus advocacy in organizational behavior" (Academy of Management Review). "Boundary management in Action Reflection Learning Research: Taking the Role of a Sophisticated Barbarian" (Academy of Human Resource Development Quarterly).

Karen Kepler Zumwalt

Evenden Professor of Education
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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).



Lyle Yorks

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ARTS AND HUMANITIES

Philip E. Aarons Adjunct Assistant Professor of Arts Administration B.A., Columbia University, 1973; J.D., 1976

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B.A., New Jersey City University, 1976; M.A., 1980;
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B.A., Boston University, 1966;
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B.S., Teachers College, 1944;
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B.A., Queens College, 1953;

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John Douglas Kuentzel Lecturer in Arts & Humanities B.A., Catawba College, 1974; M.A., Presbyterian School of Christian Education, 1982; M. Div., Union Theological Seminary in Virginia, 1984; Ph.D., Princeton Theological Seminary, 1999

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B.A., Bucknell University, 1960;

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1951; M.H.S., Jewish Theological Seminary, 1956; Ed.D.,
Harvard University, 1968

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Lori Quinn Adjunct Associate Professor of Movement Sciences and Education B.S., University of Connecticut, 1989; M.A., Teachers College, 1993; Ed.M., 994; Ed.D., 1996

Lorraine Ramig
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Justine Sheppard
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B.A., New York University,
1959; M.A., Teachers College,
1964; Ph.D., Columbia
University, 1979

Jaclyn Spitzer
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Darlyne Bailey, Ph.D. 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 of the College and
Assistant to the President

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Course Numbering

Beginning with the Autumn 1998 semester course designations for departments have changed to reflect the reorganization of the College into nine units. Formerly, all courses had a two place alphabetical sequence that began with "T". Under the new arrangement the "T" is replaced by:

A&H for Arts and Humanities BBS for Biobehavioral Studies **CCP** for Clinical and Counseling Psychology C&T for Curriculum and Teaching HBS for Health and Behavior Studies HUD for Human Development International and Transcultural Studies ITS for ORL for Organization and Leadership MST for Mathematics, Science and Technology IND for Interdepartmental Courses

The second alphabetical character under the old number system remains the same in most instances as does the four digit number; examples are:

TF4070	History of Education in the	
	United States becomes	A&HF 4070
TR4095	Applied Physiology I becomes	BBSR 4095
TJ6362	Group Practicum becomes	CCPJ 6362

Courses that cross disciplines within a department may use the three character departmental designation only, as do the interdepartmental and the curriculum and teaching courses.

The numeric portion of the course number will remain the same.

The first digit of the course number indicates the level as follows:

- 4 initial graduate
- 5 intermediate graduate
- 6 advanced graduate
- 7 dissertation seminar
- 8 dissertation advisement
- 9 postdoctoral.

The second digit indicates types of offering, as follows:

- 0 lecture
- 1 lecture
- 2 fieldwork
- 3 practicum
- 4 internship
- 5 seminar
- 6 colloquium
- 7 student teaching
- 8 workshop
- 9 independent study.

The third and fourth digits indicate internal program and course identifications.

Below is a list of New York State Education Department approved programs as of April 26, 2001.			Resource Management (Joint EDD/MBA with			
			School of Business)	0827	EDD	
Program Title	HEGIS	Award	Educational Administration	0827	EDD, MA, Me, Phd	
Computing and Education	0799	MA	Inquiry in Educational			
Elementary/Childhood			Administration Practice	0827	EDD	
Education-Preservice	0802	MA	Curriculum and Teaching	0829	ME, EDD,	
Higher Education Administration					MA	
(Joint MBA w/School of			Reading and Learning Disabilities	0830	ME	
Business)	0805	EDD, MA,	Art and Art Education	0831	EDD,	
Higher Education	0805	EDD, MA,			EDDCT, MA,	
_		ME, PHD			ME	
Student Personnel Administration	0805	MA, ME	Music and Music Education	0832	EDD,	
Adult Education Guided					EDDCT, MA,	
Intensive Study	0807	EDD			ME	
Adult and Continuing Education	0807	EDD, MA	Mathematics Education	0833	EDD,	
Adult Education Research	0807	PHD			EDDCT, MA,	
Instructional Practice in Special					ME, MS	
Education	0808	EDD, ME			PHD	
Research in Special Education	0808	EDD	Science Education	0834	PHD	
Cross-Categorical Studies	0808	EDD	Elementary School Science			
Guidance and Rehabilitation	0808	MA	Education	0834	EDD, MA,	
Supervision of Special Education					ME, MS	
Programs	0809	ME	Secondary School Science			
Administration of Special			Education	0834	ME, MS,	
Education Programs	0809	EDD			EDD, MA	
Mental Retardation	0810	EDD, MA,	College Teaching of			
		PHD	Physical Science	0834	EDDCT	
Giftedness	0811	EDD, MA	College Teaching of Earth			
Hearing Impairment	0812	EDD, MA	Science	0834	EDDCT	
Blindness and Visual Impairment	0814	EDD, MA	College Teaching of Biological			
Behavioral Disorders	0816	EDD, MA,	Science	0834	EDDCT	
		PHD	Education of Teachers in Science	0834	EDD, ME	
Learning Disabilities	0818	EDD, MA	Supervision in Science Education	0834	EDD, MA,	
Physical Disabilities	0819	EDD, MA,			ME, MS	
		PHD	Applied Physiology	0835	EDD, MA,	
History and Education	0821	EDD, MA			ME	
		ME, PHD	Motor Learning	0835	EDD, MA,	
Philosophy and Education	0821	EDD, MA,			ME	
		ME, PHD	Physical Education	0835	ME, MA,	
Psychology: Psychology					EDD	
in Education	0822	MA	Family and Community Education	0837	EDD	
Educational Psychology:			Applied Physiology & Nutrition	0837	MS	
Human Cognition and Learning	0822	EDD, MA, ME, PHD	Health Education	0837	EDD, MA, MS	
School Psychology (Applied		WLL, TIID	International Educational		1410	
Developmental & Learning			Development	0899	EDD, MA,	
Psychology)	0822	ME	Вечеюриене	00//	ME	
School Psychology (Applied	0022	WIL	Dance and Dance Education	1008	MA	
Educational Psychology)	0822	EDD, PHD	Art Administration	1099	MA	
Early Childhood Education	0823	EDD, MA,	Tite riginingeration	10//	14171	
Zarry Chinanood Education	002)	ME				
Early Childhood/Special Education	0823	MA, ME	Teaching of Spanish	1105	EDD,	
Applied Statistics	0824	MS		1107	EDDCT,	
T F					MA, ME, PHD	
					,,	

HEGIS CODES

Teaching of ASL as a Foreign			Applied Anthropology		
Language	1199	MA	(In Cooperation with GSAS)	2202	PHD
Nursing Organization			Anthropology and Education	2202	EDD, MA,
Executive Role	1203	EDD, MA,			ME, PHD
		ME	Politics and Education	2207	EDD, MA, ME
Professorial Role	1203	EDD, MA,	Sociology and Education	2208	EDD, MA,
		ME			ME, PHD
Nurse Educator/Nurse Executive	1203	EDD	Interdisciplinary Studies in		,
Nurse Executive: Nursing	1209	LDD	Education	4999	EDD, MA,
Organization Executive Role	1203	EDD	Education	4///	ME
Nurse Executive (Accelerated	1203	EDD	Componentias and International		MIL
	1202	3.6.4	Comparative and International	5000	EDD MA
Program)	1203	MA	Education	5000	EDD, MA,
Speech and Language Pathology					ME, PHD
and Audiology	1220	EDD, ME,	Instructional Technology		
		MS, PHD	and Media	5030	EDD, MA,
Speech and Language Pathology	1220	EDD, ME,			ME
		MS	Bilingual/Bicultural Education	5040	MA
Nutrition Education	1306	EDD, MS			
Nutrition and Public Health	1306	EDD, MS,	Program in Law & Educational		
		MA	Institutions	5045	ME
Community Nutrition Education	1306	ME	Postdoc. Respecialization in		
English Education	1501	PHD	Clinical Psych.	5047	ND
Teaching of English	1501	EDD, EDDCT,	Clinical Neuropsychology	J 0 17	1,12
reacting of English	1701	MA, ME	(Statement of Attendance)	5049	ND
Applied Linguistics	1505	EDD,	Neuroscience and Education	5049	ME
Applied Linguistics	1)0)		Neuroscience and Education	7049	MIL
6 : ::	150/	MA, ME			
Communication	1506	EDD, MA,			
		ME			
Teaching of English to Speakers					
of Other Languages (Japan)	1508	MA			
Teaching of English to Speakers					
of Other Languages	1508	EDD, EDDCT,			
		MA, ME			
Religion and Education					
(with J.T.S. and U.T.S.)	1510	MA			
Religion and Education	1510	EDD			
Religion and Education					
(with J.T.S. and U.T.S.)	1510	EDD			
Religion and Education	1510	EDD, MA,			
	-,	ME			
Clinical Psychology	2003	EDD, PHD,			
Crimear 1 sychology	2003	MS			
Counseling Psychology	2004	EDD, PHD,			
Counseling Fsychology	2004				
r i lri .:	220/	MA, ME			
Economics and Education	2204	EDD, MA,			
		ME, PHD			
Social-Organizational Psychology					
(M.A. En Passant)	2005	EDD, PHD			
Measurement and Evaluation					
(M.A. En Passant in Psychology					
and Education)	2007	EDD, PHD,			
		ME			
Measurement Evaluation	2007	EDD, MA,			
		PHD, ME			
Psychology: Organizational	2008	MA			
Psychology: Developmental	2009	MA			
Developmental Psychology	2009	EDD, PHD			
Teaching of Social Studies	2201	EDD, THD			
reacting of oocial ordidics	2201	ME, PHD			
		1411, 1 1 1 1			

Admissions Application Deadlines

For applicants wishing to start in the Summer or Fall Semesters

Ph.D. and all psychology doctoral programs—Final Deadline: December 15.

Ed.D. programs: Priority Deadline: January 2. Final Deadline: April 1.

Master's programs: Priority Deadline: January 15. Final Deadline: April 15.

For applicants wishing to start in the Spring Semester

All programs: Priority Deadline: November 1.

Students must meet the priority deadline to be considered for scholarships.

Admissions applications received after the priority deadline are considered on a space available basis.

Certain progams have special application deadlines. Please refer to "Special Application

Requirements/Information" section in individual program descriptions.

Three lists follow: programs which start only in specific semesters, programs which do not accept applications after the priority deadline, and programs which review applications after the final deadlines on a space available basis.

Programs starting only in specific semesters

Adult Learning and Leadership (TDA): Fall only

Adult Education Guided Intensive Study (AEGIS) (TDS): Summer odd years only

Applied Linguistics (TLA) M.A., Ed.M., Ed.D.: Fall and Spring only

Arts Administration (TGC): Fall only

Clinical Neuropsychology (TSK): Fall only**

Clinical Psychology (TXC): Fall only

Cognitive Studies in Education (TK) Ed.D. & Ph.D.: Fall; Spring only in extraordinary circumstances

Counseling Psychology (TJV) Ph.D. & Ed.D.: Fall only

Curriculum and Teaching (TYZ) Ed.D.: Fall only

Developmental Psychology (TKD) Ph.D.: Fall only

Early Childhood (TYD) Ed.D.: Fall only

Early Childhood Special Education (TYZ) Ed.D.: Fall only

Education Leadership (TA) Ed.D. & Ph.D.: Fall only

Education Leadership (TA) M.A. & Ed.M.: Summer or Fall only

Education Leadership & Management (TAA): Ed.D./M.B.A.: Fall only

Gifted Education (TYZ): Ed.D.: Fall only

Higher and Postsecondary Education (TDN): Fall only

History and Education (TFH): Ph.D. and Ed.D: Fall only

Inquiry in Education Leadership Practice (TAI): Summer only

Learning Disabilities (TYZ): Ed.D.: Fall only

Motor Learning (TRM) Ed.M. & Ed.D.: Fall & Spring only

Nurse Executives (TNX & TNX) M.A. & Ed.D.: Fall only

Politics and Education (TFG): Ed.D. & Ph.D.: Fall only

Religion and Education (TFU): Ed.D: Fall only**

School Psychology (TKL & TKT): Fall only

Social Studies (TLW) M.A.: Fall or Summer only

Social Studies (TLW) Ph.D.: Fall or Spring only

Social-Organizational Psychology (TJP, TJG) Ph.D. & Ed.D.:

Fall only

Sociology and Education (TFS) Ed.D. & Ph.D.: Fall only

Speech and Language Pathology (TQC) M.S.: Fall only

Programs not accepting applications after the Priority Deadline

Adult Learning and Leadership (TDA) Ed.D. only.

Applied Linguistics (TLA) M.A., Ed.M., Ed.D.

Clinical Psychology (TXC) Ph.D.

Counseling Psychology (TJV) Ph.D. & Ed.D.

Developmental Psychology (TKD) Ph.D.

Education Leadership (TA) Ed.D. & Ph.D.

Education Leadership & Management (TAA) Ed.D./M.B.A.

Higher and Postsecondary Education (TDN) Ed.D.

History and Education (TFH) Ph.D. & Ed.D.

Inquiry in Education Leadership (TAI) Ed.D.

Politics and Education (TFG) Ph.D. & Ed.D.

Religion & Education (TFU) Ed.D.**

School Psychology (TKL & TKT) Ed.M., & Ed.D.

ADMISSIONS APPLICATION DEADLINES

Social-Organizational Psychology (TJP, TJG) Ph.D. & Ed.D.

Sociology and Education (TFS) Ph.D. & Ed.D.

Speech and Language Pathology and Audiology (TQC) M.S.

Programs which review applications after the final deadlines on a space available basis

Adult Learning and Leadership (TDA) M.A.

Anthropology & Education (TFA)

Applied Anthropology (TFO)

Applied Physiology & Nutrition (TZR)

Applied Physiology (TRA)

Art and Art Education (TGA)

Bilingual/Bicultural Education (TLB): Fall only

Cognitive Studies in Education (TKE) M.A. & Ed.M.

Communication & Education (TUC) M.A. & Ed.M.

Computing & Education (TUD) M.A.

Dance Education (TGD)**

Developmental Psychology (TKA) M.A.

Economics & Education (TFE)

Health Education (TSD)

History and Education (TFH) M.A.

Instructional Technology & Media (TUT) M.A. & Ed.M.

*Currently, this program is accepting applications to the Master of Arts degree only.

**Currently, this program is not accepting applications for admission. For updated information, please call the Office of Admission at 212-678-3710.

Learning Disabilities (TEN) M.A.

Mathematics Education (TCA)

Measurement, Evaluation, and Statistics (TMM & TMX)

Motor Learning (TRM)

Music and Music Education (TGM) Ed.D & Ed.D.C.T.

Neurosciences and Education (TKN) Ed.M.

Nutrition and Education (TSA, TSB, TSC)

Philosophy and Education (TFP)

Physical Education (TRC, TRP)

Psychology and Education (TXA or TXG) M.A.

Reading and Learning Disabilities (TZB)

Reading Specialist (TKU)

Religion & Education (TFU) M.A.

Science Education (TCB-X)

Sociology and Education (TFS) M.A. & Ed.M.

Special Education Programs in Department of Health and Behavior Studies

Teaching of American Sign Language as a Foreign Language (TEL)

Teaching of English (TLE)

Teaching of English to Speakers of Other Languages (TESOL) (TLZ) M.A., Ed.M., Ed.D.

Teaching of Spanish (TLS)**

Tatsuya Komatsu (TESOL,

Ada Kopetz-Korf (Piano)

Thomas Lollar (Ceramics)

Alan Mackenzie (TESOL,

Juliette LaMontagne (English) Lori Don Levan (Photography)

Marijeanne Liederbach (Dance)

Michael Marino (Social Studies)

Linda McKnight (String Bass)

Tokyo)

Tokyo)

Chair: Professor Ruth Vinz Location: 334L Horace Mann Telephone Number: (212) 678-8113 Fax: (212) 678-3746

Programs:

Arts:

Art and Art Education Arts Administration Dance Education Music and Music Education

Humanities:

Applied Linguistics History and Education Philosophy and Education Religion and Education Social Studies Teaching of English and **English Education** Teaching of English to Speakers of Other Languages (TESOL) Teaching of Spanish

Faculty:

Professors:

Harold F. Abeles (Music) Leslie M. Beebe (Applied Linguistics/TESOL) Mary C. Boys (Union Theological Seminary) Judith M. Burton (Art) Elizabeth A. Ellsworth (Philosophy) Maxine Greene (Philosophy and Aesthetics)-Emerita V.P. Franklin (History) David Torrey Hansen (Philosophy) Janet L. Miller (English) Ruth Vinz (English)

Adjunct Professors:

Dino Anagnost (Voice, Conducting) Angiola Churchill (Painting) Robert Greenblatt (Arts Administration) Joan Jeffri (Arts Administration) Bert Konowitz (Jazz) Nel Noddings (Philosophy)

Associate Professors:

John M. Broughton (Philosophy/Cultural Studies)

Margaret Smith Crocco (Social Studies) Barbara Ann Hawkins (TESOL) Lenore M. Pogonowski (Music) James E. Purpura (Applied Linguistics/TESOL) Graeme Sullivan (Art) Stephen J. Thornton (Social Studies)

Adjunct Associate Professors:

Gay Brookes (TESOL) Lan-Ku Chen (Music) Alice H. Deakins (Applied Linguistics) Eugenia Earle (Harpsichord) Glayol V. Ekbatani (TESOL) Alvin Fossner (Oboe, Saxophone) Franklin E. Horowitz (Applied Linguistics) Solomon Mikowsky (Piano) Joy Moser (Painting) Gerardo Piña Rosales (Spanish) Jennybelle Rardin (TESOL) Hadassah Sahr (Piano)

Assistant Professors:

James Albright (English) Lori Custodero (Music) Leo Paul Cyr (Art) Gregory W. Hamilton (English) ZhaoHong Han (TESOL) Christopher Higgins (Philosophy) Cally Waite (History)

Assistant Professors of Practice:

Ruth Bereson (Arts Administration) F. Timothy Walsh (TESOL)

Adjunct Assistant Professors:

Philip Aarons (Arts Administration) Joe Amorino (Art Education) Jennifer B. K. Eddy (Spanish) Penelope Dannenberg (Arts Administration) Margaret Dwyer (TESOL) Susan Glaser (Music, Flute) Jeanne C. Goffi (Voice) Thomas Hoyt (Music) Chin Kim (Music) I. Fred Koenigsberg (Arts Administration)

Leonard Leibowitz (Arts Administration) Roberta Martin (Social Studies) Angelo Miranda (Percussion) Prabha Sahasrabudhe (Art) John Schuder (Organ) Barbara Tischler (Social Studies) Jerry Weiner (Social Studies)

Lecturers:

John D. Kuentzel (Religion) Bede McCormack (TESOL) Terry Royce (TESOL, Tokyo) Lisa Jo Sagolla (Dance) Marilyn Shaw (English Howard A. Williams (Applied Linguistics)

Instructors:

Mary Barto (Flute) Stanley Bednar (Violin) Martha Bixler (Recorder) Elizabeth Brandjes (English) John Brown (English) Rika Burnham (Museum Studies) Christine Casanave (TESOL, Tokyo) Alexander K. Cates (TESOL, Tokyo) Carolyn Clark (Arts Administration) Julian Cohen (Social Studies) Renee Darvin (Art Education, Museum Studies) Judith Davidoff (Renaissance Instruments) Evelina Dimitrova (TESOL) Matthew Dwyer (TESOL) Laurance Fader (Viola) Bayard Faithful (Social Studies) Ethan Feinsod (Photography) James Frankel (Music Technology) Padraic Frehan (TESOL, Tokyo)

Tokvo)

Tokyo)

Erick Gordon (English)

Gena Greher (Music)

Carolyn Graham (TESOL)

Mark Helgeson (TESOL,

Brooke Jackson (English)

David Iasevoli (English)

Nanci Graves (TESOL, Tokyo)

Linguistics) For information about faculty and their scholarly and research interests, please refer to the "Faculty" section of the Catalog.

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 twofold: To promote proficiency in

Mary Alvord (English)

Oneida Morrober-Tester (Spanish) Masumi Muramatsu (TESOL, Tokyo) Michael Pellettieri (Printmaking) Claire Porter (Dance) James Preiss (Percussion) Raymond S. Pultinas (English) Ted Quock (TESOL, Tokyo) Alan Raph (Trombone, Baritone) Mary Anne Rose (Drawing) René Schillinger (English) Deborah Schwartz (Museum Studies) David Shaich (String Bass) Stephen Shapiro (English) Ruthie Stern (English) Mykola Suk (Piano) Peter Swords (Arts Administration) Tak Uemura (TESOL, Tokyo) Leo Ursini (Saxophone, Jazz) Gerard Vezzuso (Photography) Martin Vinik (Arts Administration) Lisa Vujovich Rigisich (English) Hansen Waring Zhang (Applied Linguistics) Martha Williams (Cello) Candy Wilmot (English) Linda Wine (Applied Chris Gallagher (TESOL, Shakti Gattegno (TESOL)

specific fields; and to explore the purposes, practices and processes of education both within—and across—disciplines. Individual fields of study include: philosophy, history, culture, criticism, religion, social studies, language studies as well as linguistics and the arts.

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 seven 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.

Arts:

Art and Art Education Arts Administration Dance and Dance Education Music and Music Education

Art and Art Education

(Code: TGA) Program Coordinator: Professor Judith M. Burton Website: www.tc.columbia.edu/ a&hdept/arted

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.)

Special Application Requirements/Information: All applicants are required to submit a portfolio (slides 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 strongly advised. For the Ed.D. and the Ed.D.C.T.A. 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 32 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.

The 38 point M.A. degree with teacher certification is a Stateapproved program for those wishing to teach art K-12 in public schools. A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

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 Administrative-Supervisory Certification option are expected to have at least five years of teaching or

other professional experience in art education.

The 90 point Ed.D. and Ed.D.C.T.A. 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 acceptance to the Ed.D.

The 90 point Ed.D. in 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.A. 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 national or international.

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 students 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 Department's five programs 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. The 38-point M.A. offers New York Stateapproved teacher certification. Students in other M.A. degree programs may opt for the stateapproved Art Administration-Supervisory Certification, or the Museum Education concentration (see below.)

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, mini-courses, opportunities for involvement in professional development workshops and summer study. Suitably qualified students may also apply for apprenticeships in the Center for Arts Educa-

tion Research where they may assist on funded projects—studying artistic development, or assessing the relationships between schools and cultural organizations.

Degree Requirements:

Master of Arts (32 points)

Required courses in Art Education (14 points minimum):

- A&HA 4080, Artistic development: children
- A&HA 4088, Artistic development: adolescence to adulthood
- A&HA 4081, Curriculum design in art education
- A&HA 4085, Historical foundations in art education
- Studio (two sessions)
- A&HA 5922, Master's seminar

Required courses outside the program (6–9 points): Chosen with advisor approval.

Elective courses from: Art education, studio, other programs of the College (9–12 points): Chosen with advisor approval.

In addition: Students in this M.A. program are required to complete an integrated written project on a theme or research topic arising from their interests; students may offer a Macy Gallery exhibition in partial fulfillment of their degree requirements. All students are urged to attend the Program and Department-wide workshops offered throughout the academic year; topics vary.

The Master of Arts Teacher Certification (38 points)

Required courses in Art Education (26 points minimum):

- A&HA 4080, Artistic development: children
- A&HA 4088, Artistic development: adolescence to adulthood

- A&HA 4281, Field observation in art education (two sessions)
- 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&HG 5181, The arts in education
- Studio (two sessions)
- A&HA 4079, America's cultures: implications for art education
- A&HA 4722, Supervised student teaching and seminar: elementary
- A&HA 4702, Supervised student teaching and seminar: secondary
- Plus: two weekend workshops, topics vary each year
- C&T 4504, Child substance abuse detection

Required courses outside the program (6–9 points): Chosen with advisor approval.

Elective courses from: Art education, studio, other programs of the College (3–6 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 mount a Macy Gallery exhibition combining their own art work with that of the pupils taught during their practicums. Students are also expected to attend the Department-wide series of workshops offered throughout the academic year; topics vary.

Master of Education (60 points)

Required courses in Art Education (27 points minimum):

- A&HA 4080, Artistic development: children, and/or
- A&HA 4088, Artistic development: adolescence to adulthood

- A&HA 4081, Curriculum design in art education
- A&HA 5001, Research methods in arts education
- A&HA 4087, Processes and structures in the visual arts
- A&HG 5181, The arts in education
- Studio (two sessions)
- A&HA 5086, Art in visual culture
- A&HA 4079, America's cultures: implications for art education
- A&HA 5922, Master's seminar

Required courses outside the program (6–9 points): Chosen with advisor approval.

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

In addition: see expectations for the M.A. above.

The Ed.M. degree offers two additional options:
Art Administrative-Supervisory Certification. Consistent with New York State regulations, the Certification option requires 18 points of course work in museum studies, aesthetics, artistic development, research, arts administration and a supervised internship.

Doctor of Education (90 points)

Required courses within the specialization (16 points):

- A&HA 5001, Research in arts education
- A&HA 5581, Studio seminar
- A&HA 5500, Pro-seminar
- A&HA 6502, Doctoral seminar
- A&HA 7502, Dissertation seminar (two sessions)
- A&HG 8900.02, Dissertation advisement

Suggested courses (15 points minimum):

- A&HA 4070, Artistic development: children
- A&HA 4088, Artistic development: adolescent to adult
- A&HA 5081, Advanced curriculum design
- A&HA 4085, Historical foundations
- A&HA 4082, Arts in contemporary life
- A&HA 4087, Processes and structures
- A&HA 6021, Arts administration and supervision
- A&HA 6520, Clinical internship

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 expected to offer a professional presentation such as: a public reading from a published work of their own, a Macy Gallery art exhibition, a curated exhibition in a public or private gallery, an account of a research or curriculum development project. Each level of certification 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 6002, Teaching art at the college level
- A&HA 5081, Curriculum in higher education
- A&HA 6482, Internship or special project
- A&HA 5086, Art in visual culture
- A&H 5500, Pro-seminar
- A&HA 6502, Doctoral seminar
- A&HA 7502, Dissertation seminar (two sessions)
- A&HA 8900.02, Dissertation advisement

Suggested courses (10 points minimum):

- A&HA 4088, Artistic development: adolescent to adult
- HUDK 5021, Aesthetic development
- A&HA 5082, Philosophies of art in education
- A&HA 4082, Arts in contemporary life
- A&HA 5001, Research in arts education
- A&HA 6002, Administration and supervision at the college level

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

Suggested studio electives (15 points minimum): Chosen with advisor approval.

In addition: see Ed.D. above. Requirements for the dissertation for the Ed.D.C.T.A 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 5082. Philosophies of art in education (2–3)
Faculty. Examination of theories of the arts, including functions and aesthetic values which underlie arts education practice and criticism. Development of student's own views and references for practice. 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 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.

A&HA 6502. Doctoral seminar: arts in education (2)

Faculty. For doctoral candidates to identify their area of research interest and to narrow their topic.

A&HG 6580. Problems in art and education (2–4)

Faculty. Specific problems of art and art education examined. Different topics each semester. Permission required. Special fee \$15.

A&HA 7502. Dissertation seminar in the arts in education (2) Professor Burton and faculty. 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 8900.02. 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 (2)

Professor Cyr. 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 America's cultures: Implications for arts education (Noncredit or 2-3) Professor Sahasrabudhe. The course will explore the arts and aesthetics of various American sub-cultures, including cultures-of-origin, and will involve art teachers, art educators and other participants in a process of defining and articulating understandings of America's emerging cultures. Class lectures will focus on critical issues, problematic domains in specific cultures, and will develop understandings, sensitivities and skills required for cross-cultural and intercultural dialogues and interactions. Also discussed will be models for program design, the identification of content (artists, artworks, aesthetic theories, philosophies, art-events, myths, folklore, rituals) and cultural conventions which must be considered when planning for multicultural art education. Special fee: \$25.

*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. Lab 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 nontraditional 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

Dr. Amorino. Opportunity for indepth 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 about the role of materials in supporting, integrating and challenging the artistic growth of young people in school. Prerequisite:

A&HA 4080, A&HA 4088, or permission of instructor. Required of all students in all degree programs. Special fee: \$30.

*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 issues I: art museums and their culture

Ms. Burnham. 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)

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. 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. Prerequisites: A&HG 4080, A&HG 4081, A&HG 4088 and A&HG 4088. M.A. candidates should plan to take student teaching in their last semester of course work towards their degree.

A&HA 4722. Supervised student teaching in art education: elementary (3)

Ms. Darvin. 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. 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.

*A&HA 5064. Experiments in content (1–3)

Faculty. An examination of new technologies, materials, concepts, attitudes, both in their current forms as well as future application. 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 Sullivan. An analysis of curricular models at all levels of instruction. Emphasis on evaluation techniques, subject matter, and implementation processes. Prerequisite: A&HA 4081 or consent of instructor. Special fee: \$20.

A&HA5085. 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 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 in the direction of research and inquiry or into the development of instructional materials for different levels of schooling.

A&HA 5922. Master's seminar in art education (2)

Professor Sullivan. Permission required. Required for all M.A. and Ed.M. students in the last 10 credits of their program. Guided independent work in the study of music, art, and dance, culminating in the development of a master's project. Special fee: \$30.

A&HA 6002. Teaching and administration of art education in college (3)

Dr. Churchill. The role and status of art in higher education, varying programs and objectives, problems and approaches in teaching and administration. Special fee: \$15.

A&HA 6021. Supervision and administration in arts education (3)

Ms. Darvin. Permission 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 through 12 (2)

Ms. Darvin. Permission 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)
 Through class production utilizing 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: \$740 plus special fee.

A&HA 4089. New media, new forms: technological trends in art education (2–3)

Examines new technological tools and new media in art education: the impact of technology in the art room, the changing role of the art educator, and the convergence of visual technologies. Offered summers. Enrollment limited. Special fee: \$25.

- *A&HA 4092. Introduction to ceramics (Noncredit or 2–3) Mr. Lollar. Enrollment limited. For beginners only. Introduction to the basic techniques of hand building, the potters wheel and slab construction. Surface decoration and three-dimensional design. Stoneware and earthenware clay bodies and firing procedures will be addressed. Special fee: \$100. Noncredit fee: \$600 plus special fee.
- *A&HA 4093. Introduction to sculpture (Noncredit or 2–3) Professor Cyr. 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. Levan, 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) Ms. Levan. 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)
Ms. Rose A critical examination of the relationship among structure, form and surface in drawing from life: objects, humans and land-

scape. 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) 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. 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)
 Professor Cyr. 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 5094. Advanced photography (Noncredit or 2–3) Mr. Feinsod. Advanced work concentrating on the inherent problems, limits and possibilities of the medium. Critical evaluation of student's own work and that of professionals through group discussion; attention given to different forms of presentation such as exhibitions, magazines, books, and slides. Special fee: \$100. Noncredit fee: \$600 plus special fee. Prerequisite: A&HA 4094 or equivalent.

*A&HA 5095. Color photography (2–3)

Mr. Vezzuso. 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. Prerequisite: A&HA 4094 or equivalent. Special fee: \$100.

Independent Studio Work

A&HA 6902. Studio work in art and education: sculpture (Noncredit or 1–4)

Professor Cyr. Permission 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 required. Enrollment limited. For advanced independent study. Noncredit for majors only. Special fee: \$30.

A&HA 6904. Studio work in art and education: painting (Noncredit or 1–4)

Faculty. Permission required. Enrollment limited. For advanced independent study. Noncredit for majors only. Special fee: \$30.

A&HA 6905. Studio work in art and education: printmaking (Noncredit or 1–4)
Faculty. Permission 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 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 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 ful-fillment of degree requirements. To be taken during the semester in which work is presented in the Macy Art Gallery. Special fee: \$120.

Independent studies and research

A&HA 4202. Fieldwork in art education (1–4)

Permission required. Professional activities in the field under faculty supervision.

A&HA 4902. Research and independent study in art education (1—4)

Permission required. Research and independent study under the direction of a faculty member.

A&HA 5202. Fieldwork in art education (1–4)

Permission 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 required. Research and independent study under the direction of a faculty member.

A&HA 6202. Fieldwork in the art education (1–4)

Permission 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) 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.

A&HA 6482. Internship in the teaching of college and museum programs (3)

Permission 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 required. Research and independent study under the direction of a faculty member.

See also:

A&H 5500. Pro-seminar in arts and humanities (2)

Faculty. Arts and humanities faculty present their recent research or debate contemporary issues to illuminate critical issues in the field, current challenges to education, innovative methods of inquiry and contemporary cultural issues.

Arts Administration

(Code: TGC) Program Coordinator: Professor Joan Jeffri

Website: www.tc.columbia.edu/academic/acad

academic, acad

Degree offered: Master of Arts (M.A.)

Special Application Requirements/Information: In addition to the general

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. Students usually begin the program in the fall semester only.

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 twentyfirst 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.

Established at Columbia University's School of the Arts in 1980, the program moved to Teachers College in 1991, expanding its curriculum and student body and maintaining its interdisciplinary curriculum with Columbia's Graduate Schools of Business and Law. Special areas of study have been created with the Program in Art Education which focuses on Museum Education and with the Program in Music Education which focuses on Music Administration and Education. Similar collaborations are being developed with music, dance and other disciplines.

From its inception, faculty and staff have consisted of persons actively involved in the field as managers, board members, consultants, authors, and artists. In addition, the program draws on a vast pool of artists, arts managers, and persons in related professions to deliver and take part in guest lectures, seminars, and informal discussions.

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.

Degree requirements:

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 master's thesis.

The core curriculum represents an unusual alliance among the faculties of Teachers College, the Graduate School of Business, and the School of Law. Included in the core requirements are principles of arts administration, cultural 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 certain elective courses, depending on the offering school. Each student is evaluated in the first year to ensure that satisfactory progress is maintained.

Courses:

A&HG 4170. Principles and practice in arts administration

Ms. Jeffri. Permission 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)

Professor Bereson. Focussing on the external and internal environment, running companies and venues, and stated and tacit policies. Attention to the administrator's resources and constrainte in both the profit and non-profit sectors.

A&HG 4173. Arts in context (3) Professor Bereson. Permission 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

Mr. Koenigsberg. Permission 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, other problems relating to authenticity of art works.

A&HG 4175. Law and the arts II (3)

Mr. Aarons, Ms. Clark, and Mr. Swords. Permission required. Lectures and seminars on not-for-profit 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. Dannenberg. Permission required. A practical exploration of fundraising research and proposal writing methods. Proposals are developed for private and public agencies and foundations. Course incorporates aspects of support for the arts, arts education, the humanities, education and artists.

* A&HG 4179 Music administration and education: organizations, issues and careers (3) Professor Berseson. 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 required. Theory and practice. Special emphasis on employers, unions, contracts, 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 Bereson. Permission required. Full-time degree candidates only. Required for all mas-

required. Full-time degree candidates only. Required for all master's students in the last 10 credits 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/Professor Bereson. Interview required. Supervised individual apprenticeship to ongoing projects in arts management, arts law, and data and information gathering on living artists in the Research Center for Arts and Culture.

A&HG 5173. Principles and practice in arts administration: performing arts (3)

Mr. Vinik. Permission 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 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.

A&HG 5175. Business policy and planning for the arts manager (3)

Mr. Vinik. Permission 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)

Permission 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 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 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 staff. Permission required. Independent research in arts administration.

Residency

A&HG 4100. Master's essay residency (0)

Ms. Jeffri. Permission required. To maintain residency and receive advisement on the Master's essay, students who have registered for the 60 required points of coursework and have not completed the master's essay, must register for this course after six terms. Special tuition: the equivalent of 1 point of credit.

See also:

A&HA 4079. Exploring America's cultures: implications for arts education (Noncredit or 2–3) A&HA 4090. Museum issues I: art museums and their culture (3)

A&HA 5001. Research in arts education (3)

A&HA 5002. Assessment strategies for the arts (Noncredit or 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 in arts education

A&HD 5019. Dance in cultural contexts (2–3)

A&HG 4048. Creative computing applications in education and the arts (3)

Dance and Dance Education

(Code: TGD) Program Coordinator: Lisa Jo Sagolla

Degree offered: Master of Arts (M.A.)*

*This program is currently not accepting applications for admission. For updated information about the program, please call the Office of Admission at 212-678-3710.

Special Application Requirements/Information:

Acceptance into the program is by audition, interview, and a review of past dance-related experiences and educational background. While it is suggested that a candidate have an undergraduate degree in dance, an undergraduate degree in any field and other appropriate dance experiences will be considered for admission.

Auditions are held twice a year: January and April. Details concerning the audition and special application forms for the program in Dance and Dance Education are available along with program information from the Dance Education office. Candidates for admission from foreign countries or from the western United States may audition via videotape. Information concerning format and specific requirements will be sent on request.

Students desiring scholarships, grants, fellowships, or financial aid are urged to audition in January and to submit all required forms by the January 15th scholarship deadline. Program assistantships are available, as are limited merit scholarships.

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

Program Description:

The Dance and Dance Education program encompasses a broad conception of dance ranging from the traditions of dance as ritual and fine art to the popular view of dance in mass culture. Dance education is emphasized throughout the curriculum and is approached as a life-long activity, taking place in multiple settings and pursued by a variety of people. Courses in dance education examine the different settings in which the various dance forms reach their audience: public and private schools, higher education, arts centers, cultural institutions, video, television and film, and other special settings.

Central to the program is a concern for the role of dance as it supports and promotes human growth and development through studio practice and cultural appreciation. The program is built around a core of courses considered essential to exemplary dance education.

The curriculum offers courses within four major areas: the body sciences, performance practice and analysis, dance pedagogy, and theory, research and implementation. Dance courses are offered in anatomy and kinesiology, composition, technique, body work, Laban Movement Analysis, cultural, historical and social contexts, production, teaching and curriculum.

Utilizing the vast resources of the New York City metropolitan area, professional studio technique classes and other related courses may be taken for academic credit, provided that appropriate arrangements can be established with that school, program or organization.

In addition to courses taken in arts education, students are expected to select courses from other offerings at Teachers College and Columbia University in order to fulfill degree requirements. Weekend workshops, master classes, colloquia, research/independent studies, fieldwork, and student teaching provide additional richness to diverse teaching, research and performing opportunities.

Within the program there are two tracks leading to the Master of Arts degree. The first is flexible, allowing the student to shape an individual program in consultation with a faculty advisor (minimum of 36 points). The second track offers experiences and study that lead to an M.A. plus a K-12 Dance Teacher Special Certification in the State of New York (36 points). In order to meet certain state and degree requirements, students work closely with their advisors to select appropriate courses and evaluate abilities.

Completion of the K-12 Certification track qualifies the graduate (upon successful completion of state tests) to teach in public education, K-12, in the state of New York. Reciprocal arrangements with other states can qualify the graduate to teach in other states, as well. Students completing the degree (with or without certification) have continued to doctoral study in dance or related fields; have worked in education departments of cultural institutions; and have taught in private education, colleges and

universities. Other graduates have continued to perform and choreograph in New York and other areas.

Student work may be shown as part of our Graduate Student Dance Concert Series. Some students choreograph, perform and self-produce professionally while pursuing a graduate degree from Teachers College. Teaching, performance, research and administrative internships offer students "real world" experience. The Dance and Dance Education program maintains professional partnerships with many of the major dance institutions and artist/ educator/scholar arts organizations in New York City, nationally and internationally. Each internship is tailored towards the goals of the individual student.

Degree Requirements:

Required courses for both tracks are:

- BBSR 4005, Applied anatomy and biomechanics (if not studied in the undergraduate degree)
- A&HD 5012, Kinesiology for dance
- A&HD 5017, Movement retraining
- A&HD 4018, Laban Movement Analysis I
- A&HD 5013, Choreography I
- A&HD 5018, Dance production
- A&HD 5019, Dance in cultural contexts: theory and application
- A&HD 5120, Introduction to dance research
- A&HD 5007, Curriculum design in dance education
- A&HD 5016, Teaching dance: adolescence through adulthood, or
- A&HD 5110, Teaching children's dance

The K–12 certification track will complete both A&HD 5016 and A&HD 5110, a teaching practicum (A&HD 4203 Fieldwork) and Super-

vised Student Teaching (A&HD 4703) as well as several education courses.

Courses:

Body Sciences

A&HD 5012. Kinesiology for dance (Noncredit or 3)
Prerequisite: BBSR 4005. Dance movements are analyzed and understood through application of anatomical principles. Special consideration is given to body alignment, range of motion, and identification and remediation of poor movement habits. Special fee: \$25. Noncredit fee: \$355.

Performance Practice and Analysis

A&HD 4010. Modern dance I (Noncredit or 2) Faculty. Develops an understanding of the basic principles of modern dance technique through a sequence of movement experiences, exploration or improvisational structures, and discussions of dance performance viewing. Noncredit fee: \$355.

A&HD 4011. Modern dance II (Noncredit or 2)

Faculty. Permission required. Prerequisite: A&HG 4010 or equivalent. Continuation of Modern Dance I. Designed to expand on the basic principles of modern dance technique through the exploration of learned dance phrases, improvisational structures and/or selected choreography and discussions of dance performance viewing. Noncredit fee: \$355.

A&HD 4014. Ballet I (Noncredit

Faculty. Practice and examination of the fundamentals of classical ballet, including elements of technique, theory, and historical background. Noncredit fee: \$355.

A&HD 4015. International dance forms (Noncredit or 2) Faculty. Theoretical and experiential exploration of one or more dance forms from other cultures enabling entry into the contexts of other cultures. Noncredit fee: \$355.

A&HD 4018. Laban movement analysis I (Noncredit or 3) A course in the principles of human movement as developed by Rudolf von Laban, and further applied in such areas as dance, acting, sports, work patterns, gesture, physical and dance therapy, psychology, and anthropology. Movement experience and analysis on four integrated levels: body, space, dynamic qualities and movement relationships to self and others. Special fee: \$25. Noncredit fee: \$355.

A&HD 4019. Laban movement analysis II (Noncredit or 2-3) Prerequisite: A&HD 4018 or equivalent. Continuation of Laban movement analysis I. An examination of the principles of human movement as developed by movement theorist Rudolf von Laban. Continued analysis of the principles of Effort and Shape (Choreutics/space harmony) as guided through movement experiences. Dynamic qualities and spacial potentials are analyzed, explored and synthesized through spontaneously invented or reproduced dance/movement material in relation to self and others. Special fee: \$25. Noncredit fee: \$355.

A&HD 5013. Choreography I (Noncredit or 2–3) Development of strategies and understandings concerning the nature of the dance-making process through improvisation, creation of short movement studies and complete dances, and viewing/perceiving the processes and results. Special fee: \$30. Noncredit fee: \$355.

A&HD 5014. Choreographic problems (2–3)

Permission required. Prerequisites: A&HD 5013 or equivalent. An indepth exploration of creative process and teacher/learner interactions as applied to the teaching of choreography. Special fee: \$35.

A&HD 5018. Dance production (0–2)

A lecture/laboratory class focusing on theory and practice of production of dance concerts and events. Special fee: \$40. Tuition for zero (0) points: \$300.

A&HD 5111. Dance technique (Noncredit or 1)

Permission required. Enrollment limited. Studio course to study techniques in selected professional dance schools/studios in New York City. Spring and summer semesters meet on campus. Course meets two days per week. Special fee: \$60. Noncredit fee: \$355.

Theory: Research and Implementation

A&HD 4903. Research and independent study in dance education (1–4)

Faculty. Permission required. Research and independent study under the direction of a member of the dance education program faculty.

A&HD 5019. Dance in cultural contexts: theory and application (Noncredit or 3)

Enrollment limited. A view of dance focusing on historical, sociological, religious, anthropological, cultural and political perspectives. This course includes individual and group learning of a selected culture's dance(s) and practical, developmentally appropriate methodologies for the teaching/learning process in various contexts. Special fee: \$25. Noncredit fee: \$355.

A&HD 5120. Introduction to dance research (2)

This course provides a forum for preparing the master's project proposal. This course includes an introduction to qualitative inquiry in dance and dance education. Special fee: \$25.

A&HD 5903. Research and independent study in dance education (1–4)

Permission required. Research and independent study under the direction of a dance education faculty member.

Dance Pedagogy

A&HD 4203. Fieldwork in dance education (1–4)
Permission required. Professional activities in the field under the supervision of a member of the dance education program faculty.

A&HD 4703. Supervised teaching in dance education (4) Permission required. Prerequisites: A&HD 5016 and A&HD 5110. 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 for those interested in dance certification in New York City and other states. M.A. candidates should plan to take student teaching in their last semester of course work towards their degree.

A&HD 5007. Curriculum design in dance education (Noncredit or 3)

Introduction to principle models of dance education curricula and supporting literature embedded within historical context. Analysis of curriculum organization, discipline content, desired learning outcomes, human development in relation to dance study and assessment models as highlighted by current research. Special fee: \$25. Noncredit fee: \$355.

A&HD 5203. Fieldwork in dance education (1–4)
Permission required. Professional activities in the field under the supervision of a member of the dance education program faculty.

A&HD 5519. Current topics and issues in dance education (1–3) Permission required. Enrollment limited. Focus on topics and issues in dance education (i.e., curriculum design, assessment, advocacy) as highlighted by current research or conferences. Special fee: \$25.

See also:

- A&HA 4048. Creative computing applications in education and the arts (3)
- A&HA 4079. Exploring America's cultures: implications for arts education (3)
- A&HA 4082. The arts in contemporary life (2–3)
- A&HA 4084. Art and technology (Noncredit or 2–3)
- A&HA 4089. New media, new forms: technological trends in art education (2–3)
- A&HA 4090. Museum issues I: art museums and their culture (3)

- A&HA 5001. Research in arts education (3)
- A&HA 5002. Assessment strategies for the arts (Noncredit or 3)
- A&HA 5082. Philosophies of art in education (2–3)
- A&HA 5804. Museums as resource: workshops at the Metropolitan Museum (1–4)
- A&HG 5181. The arts in education (2–3)
- A&HM 4020. Music for the world's children (2–3)
- A&HM 5025. Creativity and problem solving in music education (Noncredit or 2–3)
- BBSK 4005. Applied anatomy and biomechanics (3)

Music and Music Education

(Code: TGM)
Program Coordinator:
Professor Harold Abeles
Website:
www.tc.columbia.edu/
academic/A&Hdept/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.)

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 also use this scholarly paper 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 encouraged 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.

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. They are seasoned practitioners, who reflect a wide range of expertise in comprehensive musicianship, early childhood music, 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. The 40 point Master of Arts offers New York State approved Teacher Certification. Students in this M.A. program take course work and then a semester of carefully guided student teaching in a school that reflects the Music Program's philosophy.

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

- Teaching and supervision of music in elementary and secondary schools
- Teaching and administration of music in colleges and universities
- Teacher of music in private school and studios
- Research and practice of music in institutions of higher learning, and
- Interdisciplinary areas of arts and humanities, music and special education, new technology in music education, and adult education.

Programs of study for all degrees include five major categories: pedagogy of music, research, comprehensive musicianship, performance, and non-major requirements. The music courses are divided into four general areas:

- Pedagogy
- Comprehensive Musicianship
- Music Performance
- Research

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.

The Master of Education degree (Ed.M.) in 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 sixty points of graduate study. Major emphasis is placed on the improvement of instruction and curriculum.

The program for the degree may also be designed to include New York State Certification as a School Administrator and Supervisor. Candidates who show clear promise of success in further graduate study may apply the completed course work toward the doctorate.

The Ed.D. and the Ed.D. in College Teaching offer preparation for professional careers in a variety of settings. The Ed.D. prepares students for positions in the Teaching and Supervision of Music in Elementary and Secondary Schools, the Teaching and Administration of Music in Early Childhood Settings, the Teaching of Music in Private School and Private Studios, the Teaching and Administration of Music in Colleges and Universities, and careers in Music and Interdisciplinary Areas, such as the Arts and Humanities, Special and Adult Education. 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.

Degree Requirements:

Master of Arts

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 32point 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 two points are earned) outside of the Program (A&HM) are required. Specifically, students are expected to enroll in:

- (1) A&HM 5921, Master's seminar in music education (2)
- (2) At least two courses from the Pedagogy area, one of which must be selected from the following:
- 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
- (3) At least one course from the Research Area (A&HM 5023, Vocal pedagogy, may be used to fulfill this requirement).
- (4) At least one course from Comprehensive Musicianship Area.

- (5) At least one course from the Music Performance Area.
- (6) 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, complete a summative project, and demonstrate competent musicianship in performance.

Master of Arts with PreK–12 Certification

The M.A. degree with Teacher Certification is a program designed for students with an undergraduate degree in music who wish to prepare for teaching music in the public schools. The 40 point degree program leads to both the M.A. degree and New York State Teacher of Music, PreK-12 Certification. Students desiring state certification should identify themselves at their first registration, and be assigned to a certification advisor for guidance in this process. All requirements for certification can be completed in the M.A. program if the candidate is identified at the first registration.

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 problem solving in music education
- A&HM 5026, Music skills and the creative strategies

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

Required Content Courses (5–7 points):

- Applied music (2-4)
- A&HM 5032, Comprehensive musicianship I (3)

Required Fieldwork Courses (9 points):

- A&HM 4201 Fieldwork
- A&HM 4701 Student teaching

Required Non-Departmental Courses (6-9 points): Consult a faculty advisor.

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

Master of Education

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 2 credits each from outside the Programs in Music Education (A&HM). These electives are to be selected from areas deemed appropriate in consultation with the faculty advisor.

Candidates for the Ed.M. degree must complete a summative project. However, students planning to apply for admission to the doctoral program at Teachers College may choose to write a scholarly paper demonstrating their ability to research a topic approved by their advisor.

New York State Approved Program for Music Administrative-Supervisory Certification Institutional recommendation for the certificate is based upon the completion of the requirements for the Ed.M. degree in Music Education (refer to Ed.M. degree statement) which shall include 18 points in course work dealing with public school administration and supervision and an internship. Points related to the internship are not to be included in the 18 points of school administration and supervision courses.

Fundamentals of Administration: (6 points)

Courses chosen in consultation with Certification Coordinator.

- ORLA 4001, Overview of administration
- ORLA 4031, Leadership & institutional analysis: early childhood education administration
- ORLA 4033, Leadership & institutional analysis: administration of secondary schools
- ORLA 4038, Leadership & institutional analysis: reforming elementary schools
- ORLA 6018, Staff personnel administration

Curriculum and Teaching: (6 points)

Courses chosen in consultation with Certification Coordinator.

- C&T 4004, Basic course in school improvement
- C&T 4008, Creativity, critical thinking, and curriculum design
- C&T 4051, Supervision for elementary and secondary schools

- C&T 4052, Designing curriculum and instruction
- C&T 4145, The education of youth and adolescents
- C&T 4160, Supervision in pre-service teacher education programs
- C&T 5053, Staff development processes and procedures
- C&T 6152, Changes in role and organization of instructional leaders

Music Education: (6 points)

- A&HM 5020, Foundations of music education
- A&HA 6021, Supervision and administration in arts education

Internship: (1-4 points)

 A&HM 6421, Internship in the supervision & administration of the arts-music education

Doctor of Education and Doctor of Education in College Teaching of an Academic Subject

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.

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 insure 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.

Initially the student is admitted to a program of study leading toward becoming a certified doctoral candidate when the following have been achieved:

1) successful completion of at least 15 points of course work and 2) passing the departmental certification examination.

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. For more details, consult the dissertation proposal bulletins.

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/academic/A&Hdept/tgm for more specific information.

Courses:

Pedagogy

*A&H 4048. Creative computing applications in education and the arts (3)

Professor Abeles. This course will examine strategies for developing creativity and problem-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&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 4020. Music for the world's children (2–3)

Ms. Greher. 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 (3)

Professor Custodero. 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: \$20.

A&HM 4023. Choral methods, procedures, and materials (3) Dr. Anagnost. 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: \$50.

A&HM 4028. Practices and materials of teaching piano (Noncredit or 3–4)
Faculty. The presentation and analysis of procedures for group and individual piano instruction.
Modern texts, supplementary materials, and general piano repertory are discussed with relation to their use in private studios and public schools.

A&HM 4029. Introduction to new technologies in music education (2–3)

Mr. Frankel. Enrollment limited to 12. Understanding the principles of creating and teaching with synthesizers, MIDI, computers, emphasizing the application to music education. Materials fee: \$50.

*A&HM 4030. Integrating music in the classroom (2–3) Professor Pogonowski. Primarily for non-majors. 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 (4) Professor Pogonowski. Permission required. Prerequisites: A&HM 5025. 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 City 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. For private and group music teachers. Developmentally appropriate strategies and materials for instrumental

instruction integrating improvisation, composition, movement, singing, and ensemble playing. Special fee \$25.

A&HM 5023. Vocal pedagogy I

Dr. Goffi. Permission required. Investigation and application of recent research in voice production and pedagogy. Phonetic approach to singers' diction; consideration of style and interpretation in the performance of assigned solo and concert literature.

A&HM 5024. Vocal pedagogy II (3)

Dr Goffi. Permission required. Prerequisite: A&HM 5023. Continuation of background studies begun in A&HM 5023, Vocal Pedagogy I. 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.

A&HM 5025. Creativity and problem-solving in music education (Noncredit or 3)

Professor Pogonowski. Designed for pre-service 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 (Noncredit or 3)

Professor Pogonowski. Enrollment limited to 25. Prerequisite: A&HM 5025. Designed for preservice and in-service majors to examine and experience problemsolving 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 (Noncredit or 2–3)

Mr. Frankel. 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 5921. Master's seminar in music education (2) Professor Custodero. Permission required. Required for all M.A. students in the last 10 credits of their program. Guided independent work in the study of music culminating in the development of a master's project. Special fee: \$25.

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) Faculty. Music majors only. Theory and practice of applied music instruction in college for both major and non-major students. Emphasis on developing individual competence and musical understanding. Required for TGM students who wish to be Graduate Assistants in the applied music program.

A&HM 6024. Piano teaching: intermediate and advanced (Noncredit or 1–3)
Faculty. Procedures and materials for piano instruction from the intermediate to college levels, including problems of the adolescent student.

A&HM 6421. Internship in the supervision and administration of music (1–4)

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&HM 5001. Research in arts education (3)

Professor Abeles. An examination of research studies and strategies for conducting research in the arts. Special fee: \$25.

A&HM 5002. Assessment strategies for the arts (Noncredit or 3) Professor Abeles. 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 music perception and cognition (3)

Professor Abeles. An examination of acoustic and psychological foundations of music.

A&HM 5022. Young children's musical development (2–3) Professor Custodero. 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: \$20.

Comprehensive Musicianship

*A&HM 4043. Contemporary music (3)

Permission required for non-majors. The changing role of music in the 20th century; evolution of new social functions of music and musical institutions; the contemporary composer and development of new musical languages. Special fee: \$25.

*A&HM 4044. Interpretation of Baroque music (Noncredit or 2) Dr. Earle. Permission required for non-majors. Laboratory courses in ornamentation improvisation and idiomatic conventions of-notation and rhythm in Baroque keyboard solo and ensemble music.

A&HM 4045. Popular and youth music in the curriculum (Noncredit or 2)

Faculty. A comprehensive study of the components of jazz, folk, rock, country, and other popular idioms through analysis and performance with application to school music curricula. Special fee: \$25.

A&HM 5030. Music analysis (3) Faculty. For Music majors only. Designed for doctoral students whose dissertations relate to musical analysis. Techniques and approaches to analysis based upon representative literature of all periods.

A&HM 5032. Comprehensive musicianship I (3)

Professor Pogonowski. Through analysis, composition, critical listening, improvisation, and performance, 17th 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 5033. Comprehensive musicianship II (3)

Professor Pogonowski. Maximum enrollment: 25. An examination of 19th century theoretical constructs through analysis, composition, critical listening, improvisation, and performance. Materials fee: \$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 5042. Choral literature survey (2–3)

Dr. Anagnost. 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: \$50.

A&HM 6030. Composition and analysis (3)

Faculty. Prequisites: A&HM 5032 and 5033. For music majors only. Recommended for doctoral students whose dissertations involve composition or musical analysis.

Music Performance-Conducting

The non-credit 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: \$50.

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: \$50.

Music Performance-Instrumental/Vocal

The non-credit fee for instrumental instruction is equal to 2 points at the current tuition rate.

*A&HM 4055. Class instruction in piano for non-music majors (Noncredit or 2)

Faculty. Class instruction in piano for students with little or no musical background. How to read and create music at the piano; ways to use music in relation to major study or personal enrichment.

A&HM 4056. Chamber music (Noncredit or 2)

Dr. Earle. For music majors only. The study and performance of chamber works from the Baroque through contemporary periods. Special fee: \$35.

A&HM 4057. Sight-reading at the piano (Noncredit or 2) Faculty: Practicum for keyboard majors on the development of sight-reading techniques. To improve skills and gain a conceptual understanding of the reading process.

A&HM 4058. Piano ensemble (Noncredit or 2)

Faculty. Survey and performance of original works for duet and two pianos from the easier grades through the advanced repertory. Special emphasis on teaching procedures and ensemble rehearsal techniques.

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 the above number. Special fee: \$75.

*A&HM 4343. Organ instruction for non-majors (Noncredit or 2)

Dr. Schuder. Written permission from the Music Education Program, Room 520A Horace Mann, required. Class and 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 the above number Special fee: \$75.

*A&HM 4350. Piano instruction for non-majors (Noncredit or 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 the above number Special fee: \$75.

*A&HM 4351. Harpsichord instruction I (Noncredit or 2) Dr. Earle. 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 the above course number. Special fee: \$75.

*A&HM 4352. Voice instruction for non-majors (Noncredit or 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 the above number. Special fee: \$75.

A&HM 4355-A&HM 4356. Keyboard musicianship for instrumentalists and vocalists (Noncredit or 2)

Faculty. The development of basic skills in sight-reading, transposing, improvising, and melody harmonization in traditional and contemporary idioms. Focus on professional needs of music educators.

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 (Noncredit or 1)

A&HM 5052. Vocal literature and interpretation (Noncredit or

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. Co-requisite: 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/he 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.

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 5171. Instrumental music instruction II (Noncredit or 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: \$75.

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 5350. Piano instruction for music majors (Noncredit or 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 the above number. Special fee: \$75.

A&HM 5351. Harpsichord instruction II (Noncredit or 2) Dr. Earle. 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 the above number. Special fee: \$75.

A&HM 5352. Voice instruction for music majors (Noncredit or 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 the above number. Special fee: \$75.

A&HM 5353. Organ instruction for music majors (Noncredit or 2) Dr. Schuder. 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 the above number. Special fee: \$75.

A&HM 5355. Art and technique of keyboard accompaniment

Faculty. For music majors and music education majors whose main performing medium is piano. Provides practical experience with the varieties of music the accompanist needs to know and attention to accompanying skills.

Fieldwork, Internships and Research/Independent Study

Permission 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, Section 001. 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.

A&HM 6201. Section 002. Advanced Fieldwork in music education: early childhood music (1-4)

Professor Custodero. Permission required. For music majors only. Professional activities in the field under the supervision of a member of the music education program faculty.

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. Satisfies the internship requirement for administrative and supervisory certification. 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) Faculty. Guided experiences in the teaching of music in departments of metropolitan-area colleges.

A&HM 6501. Doctoral seminar in music education (1–3) 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 (1–4) Permission required. For music majors only. Research and independent study under the direction of a member of the music education program faculty.

A&HM 6901 001. Advanced study in music education

A&HM 6901 002. Advanced study in composition Prerequisites: A&HM 5032 and A&HM 5033 or equivalent

A&HM 6901 003. Advanced study in conducting Prerequisites: A&HM 4050 and A&HM 5050.

A&HM 6901 004. Advanced study in early childhood

Prerequisites: A&HM 4021

A&HM 4060.

A&HM 6901 005. Advanced study in jazz Prerequisites: A&HM 4059 and

A&HM 6901 006. Advanced study in music analysis

A&HM 5033 or equivalent A&HM 6901 007. Advanced study in music technology

Prerequisites: A&HM 5032 and

Prerequisites: A&HM 4029 and A&HM 5029 or equivalent

A&HM 6901 008. Advanced study in repertoire

A&HM 6901 009. Advanced study in applied music pedagogy

A&HM 6901 010. Advanced study in harpsichord pedagogy

A&HM 6901 011. Advanced study in organ pedagogy

A&HM 6901 012. Advanced study in piano pedagogy

A&HM 6901 013. Advanced study in voice pedagogy

A&HM 6971. Research and independent study in music education (1–4)

Permission required. Research and independent study under the direction of a faculty member in music education.

A&HM 7501. Dissertation seminar in music education (1–3) 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. May be repeated.

A&HM 8900. Dissertation advisement in music education (0) Section: 01.

Permission 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&HG 4048. Creative computing applications in education and the arts (3)
A&HA 4079. Exploring America's cultures: implications for arts education (Noncredit or 2–3)
A&HM 5001. Research in arts education (3)

Professor Abeles. An examination of research studies and strategies for conducting research in the arts. Special fee: \$25.

A&HM 5002. Assessment strategies for the arts (Noncredit or 3) Professor Abeles. An examination of traditional and alternative strategies for assessing art objects and artistic performance, knowledge of the arts, and attitudes toward the arts.

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

A&HG 5181. The arts in education (2–3)

A&HA 6021. Supervision and administration in arts education (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.

Humanities:

Applied Linguistics
History and Education
Philosophy and Education
Religion and Education
Social Studies
Teaching of English and
English Education
Teaching of English to
Speakers of Other Languages
(TESOL)
Teaching of Spanish

Applied Linguistics

(Code: TLA)
Program Coordinator: Professor
Leslie M. Beebe
Website:
www.tc.columbia.edu/
academic/appliedlinguistics

Degrees offered:
Master of Arts (M.A.)

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

For updated information on the Applied Linguistics Program, consult the Applied Linguistics/ TESOL web page at: http://www.tc.columbia.edu/academic/appliedlinguistics.

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 either:

- a minimum score of 5 on the Test of Written English (TWE) in additional to the college-wide requirement of a minimum score of 600 on the TOEFL or a computerbased score of 250 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)

All non-native speakers of English must also submit either a Test of Spoken English (TSE) score of 50 or a SPEAK score of 50.

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.

Applications will be reviewed in the Fall and the Spring only and should be submitted for the priority deadlines.

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

Ed.M. applicants may transfer up to 30 credit 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 an additional 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 credit points must meet the approval of a faculty advisor.

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, how it is taught, learned and evaluated. The program emphasizes study in the following:

- Syntax
- Phonetics/phonology
- Semantics
- Discourse
- Cross-cultural pragmatics
- Acquisitional Pragmatics
- Sociolinguistics
- Second language acquisition
- Second language literacy
- First language acquisition
- Interlanguage analysis
- Language pedagogy
- Testing and assessment
- Research
- Technology in applied linguistics

Degree Requirements:

Master of Arts

The Applied Linguistics Program offers a 36-credit 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.

Courses in Applied Linguistics (or TESOL) (24–25):

- A&HL 4085, Pedagogical English grammar (3)
- A&HL 4101, Phonetics and phonology (3)
- One other elective in linguistic analysis (3)
- Second language acquisition
 (3)

- A&HL 4001, Sociolinguistics and education (3)
- A&HL 4104, Discourse analysis (3)
- A&HL 4088, Second language assessment (3)
- Teaching practicum along with an elective (3)

Required courses out of program (3 courses of at least two points each: 6 points minimum): Chosen with advisor's approval.

Elective courses in Applied Linguistics (or TESOL) (3–6): 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

The Applied Linguistics Program offers an Ed.M. that requires 60 points beyond the Bachelor's degree. 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 above or their equivalent.

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

- 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 from the following):

- A&HL 4003, Schools of linguistics
- A&HL 4008, Interlanguage analysis
- A&HL 4014, Gender, language & education
- A&HL 4005, Semantic systems and the lexicon
- A&HL 5515, Advanced topics in applied linguistics I
- A&HL 5516, Advanced topics in applied linguistics II
- A&HT 4080, Teaching in linguistically diverse classrooms
- A&HL 5581, Psycholinguistics and SLA
- A&HL 5582, Sociolinguistics and SLA
- A&HL 5583, The social psychology of SLA
- A&HL 5586, Interlanguage phonology
- A&HL 5587, Interlanguage
- A&HL 5588, Trends in SLA Research
- A&HL 5589, Language transfer in SLA

Required courses out of program (3 Teachers College courses of at least two points each, 6 points minimum):

Choose one from the following courses in statistics, measurement or research design:

- HUDM 4050, Introduction to measurement
- HUDM 4120, Basic concepts in statistics
- HUD 4120, Methods of empirical research
- MSTF 5059, Qualitative research methods for educators

Choose the other two 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

The Applied Linguistics Program offers an Ed.D. requiring 90 points beyond the B.A. 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 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 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.

Required Courses:

• HUDM 5021, Methods of empirical research (3)

One of the following:

- MSTF 5000, Methods of inquiry: Ethnography & participant observation (3)
- MSTF 5001, Ethnography & participant observation: structural & interpretative analysis (3)

- C&T 5502, Introduction to qualitative research in curriculum & teaching (2–3)
- MSTF 5059, Qualitative research methods for educators (3)
- HUDM 4120, Basic concepts in statistics (3)
- HUDM 4122, Probability and statistical inference (3)

Other courses in consultation with an advisor

Doctoral Preparation Requirements:

When doctoral students reach approximately 45 points in the program and have been at Teachers College for at least one year, they are required to register for and attend doctoral seminar every semester. Doctoral seminar is considered a fundamental venue for socialization in the research culture in our field.

Doctoral preparation involves three successive stages:

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

Doctoral students are required to demonstrate research preparedness in a substantive area by passing the research paper (A&HL 5501), the doctoral seminar (A&HL 6501 part 1), and the doctoral seminar (A&HL 6501 part 2). 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 as a part of the dissertation seminar (A&HL 7501) and complete a doctoral dissertation while continuously registered for dissertation advisement (A&HL 8901).

In order to encourage doctoral students to progress through these stages, a sequence of

seminars is customarily offered. Progress through these stages usually involves enrollment in the following sequence of seminars:

To prepare for these requirements, students will need to take the following seminars:

- A&HL 5501, Research paper: applied linguistics (1–3)
- A&HL 6501, Doctoral seminar: applied linguistics (1–3)
- A&HL 7501, Dissertation seminar: applied linguistics (1–2)
- A&HL 8901, Dissertation advisement in applied linguistics (0)

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: (* = course open to non-majors)

General

*A&HL 4000. The study of language (3)

Faculty. Survey of cognitive and social approaches to the study of language, language acquisition, language systems, 20th century movements in linguistics, language varieties and attitudes, forms and functions of language in the classroom.

*A&HL 4001. Sociolinguistics and education (3)

Professor Beebe. Language variation based on social class, race, ethnicity, age, and gender; cross-cultural pragmatics, interactional sociolinguistics, conversation analysis, language planning, and World Englishes. Pedagogical implications. Materials fee: \$20

A&HL 4003. Schools of linguistics (3)

Dr. Williams. 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 the semantic systems of English and other languages, with particular reference to the teaching and learning of vocabulary. Special fee: \$20.

A&HL 4008. Interlanguage analysis (3)

Professor Han. Prerequisite: A&HL 4087. Analysis of the processes of rule formation in second language acquisition, with focus on the classification and interpretation of learners' errors. Special fee: \$20.

*A&HL 4014. Gender, language and education (3)

Dr. Deakins. An exploration of gender-based differences in both the structure and use of the English language. (*Summers only*)

A&HL 4085. Pedagogical English grammar (3)

Dr. Williams and Dr. McCormack. 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 and 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. Prerequisite: A&HL 4085 or permission of instructor. 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. A comparative examination of the sound system and orthographic system of English and other languages, with particular reference to problems of learning and teaching. Lab fee: \$25.

A&HL 4104. Discourse analysis

Faculty and Staff. Introduction to spoken and written discourse analysis with attention to phonological, grammatical and pragmatic aspects of discourse. Development of transcription skills with applications for teaching and research. Materials 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 required. An introduction to the theory and teaching of various genres of academic writing for native and nonnative writers. Teachers are given opportunities to develop their academic writing skills.

A&HL 5153. Academic writing II (3)

Faculty. Permission required. An advanced course in the theory and teaching of expository writing. Students will work systematically on a major writing project.

A&HL 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. 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
Professor Purpura. Prerequisite:
A&HL 4088 or by permission.
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 generalizability, 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 required. Research in such areas as sociolinguistics, second language acquisition, assessment and literacy skills. Materials fee: \$20.

A&HL 5516. Advanced topics in applied linguistics II (3)

Faculty. Permission 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)

Professor Beebe. 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 5589. Topics in second language acquisition (Noncredit or 1–3 each course) Faculty. Prerequisite: A&HL 4087 or permission of instructor. An indepth examination of various perspectives on second-language acquisition. Materials fee: \$20 each course.

- A&HL 5581. Psycholinguistics and SLA
- A&HL 5582. Sociolinguistics and SLA
- A&HL 5583. The social psychology of SLA

- A&HL 5585. Discourse analysis and SLA
- A&HL 5586. Interlanguage phonology
- A&HL 5587. Interlanguage syntax
- A&HL 5588. Trends in SLA research
- A&HL 5589. Language transfer in SLA

A&HL 6587. Seminar in second language acquisition: acquisitional and cross-cultural pragmatics (3)

Professor Beebe. Permission required. Pre-requisite: A&HL 4087 or permission of instructor. An in-depth analysis of research on second language acquisition, focusing on acquisitional and cross-cultural pragmatics, pragmatic development, interlanguage pragmatics, stylistic variation, and language transfer. Offered in Fall only. Special fee: \$20.

Doctoral Preparation

A&HL 5501. Research paper in applied linguistics (1–3)
A&HL 6501. Doctoral seminar in applied linguistics (1–3)
A&HL 7501. Dissertation seminar in applied linguistics (1–2)
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 5201. Fieldwork in applied linguistics (1–6) Faculty/Staff. 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

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.

History and Education

(Code: TFH)

Program Coordinator: Professor Cally Waite

Degrees offered:

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

Special Application Requirements/Information: Sample of historical writing required for Ed.M., Ed.D., Ph.D. Students cannot begin in the summer.

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, women, Europe and other international communities, urban areas, 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.

Degree Requirements:

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

Master of Arts

The Master of Arts offers two approaches: 1) 30 points and a formal master's thesis, or 2) 32 points and a special project.

Topics and preparation of the thesis 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 must be taken outside of the program in History and Education.

Master of Education

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 outside the program.

Doctor of Education

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.

Doctor of Philosophy

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 4075 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)

Professor Franklin. 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.

*A&HH 4078. Technology and education in Western history (3) Professor McClintock. An historical inquiry into the educational implications of technological change, particularly as it has affected cultural values and the capacities to organize action and to communicate ideas. Special fee: \$30.

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) 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 5900 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 required. Methods, principles, and problems of historical research and interpretation. Designed for students throughout the College undertaking systematic inquires on historical topics.

A&HH 6042. Theories of history (3)

Faculty. Permission required. Theories of historical knowledge and the historical process.

*A&HH 6577. Topics in the history of American educational thought (3)

Faculty. Permission 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 required.

Individualized Studies

A&HH 4901. Research and Independent Study (1–8) Permission required.

A&HH 6200. Field research outside the United States (0)
Faculty. Permission required.
Required of doctoral students
when choice of doctoral research
necessitates data generation in
other countries. One year of field
experience under supervision in
approved geographical and institutional site. Students secure
approval of department chair and
principal advisor in advance, and
render periodic reports.

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 the social sciences (0–3)

Permission required. Required of doctoral students in the semester following successful completion of certification examinations.

A&HH 8901. Dissertation advisement in history and the social sciences (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.

See also:

degrees.

*A&HR 4171-4172 Religion and education in American culture (2–3)

Dr. 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

Philosophy and Education

(Code: TFP)

Program Coordinator: Professor David T. Hansen

For more detailed information, see program website at: http://www.tc.columbia.edu/ academic/philosophy

Degrees offered:

Master of Arts (M.A.) Master of Education (Ed.M.) Doctor of Education (Ed.D.) Doctor of Philosophy (Ph.D.), (Educational Policy option available)

Special Application Requirements/Information: Background in philosophy required for Ed.M. and Ed.D. Undergraduate major in philosophy required for the Ph.D. Sample of philosophical writing required for all programs except the M.A.

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 philosopher-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.

Degree Requirements:

Master's Programs

The Master of Arts and Master of Education programs are designed to introduce educators and professionals with a wide variety of interests to the study of philosophy and education. In addition to major courses in philosophy and education, 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.).

Doctoral Programs

The doctoral programs in philosophy and education are flexible and responsive to individual student backgrounds and needs. Each student takes responsibility, in consultation with his or her adviser, 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 these major courses, students are also required to do coursework in the following areas: philosophy (via the consortium, students may take courses not only in the Columbia Philosophy Department, but in those of

CUNY, Fordham, The New School, and NYU), foundations of education, and educational breadth. These requirements are modest, leaving room for students to craft a personalized course of study.

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 College-wide requirements, procedures, and deadlines for doctoral students.

Courses:

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

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. An analysis of the principal works of John Dewey.

A&HF 5093. Ways of knowing (2–3)

Faculty. For all doctoral students; masters students by permission. 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;

Faculty. For all doctoral students; masters students by permission. 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; masters students by permission. 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; masters students by permission. 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 (3)

Faculty. For doctoral students, especially in Philosophy and Education; masters students by permission. 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. 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: \$15.

A&HF 6000z. Doctoral proseminar: ancient philosophy and education (4)

Faculty. Permission 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 6100z.

A&HF 6100z. Doctoral proseminar: modern philosophy and education (4)

Faculty. Permission 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 6000z.

A&HF 6500. Dissertation proposal workshop in philosophy and education (0–3)

Faculty. Permission Required. Prerequisite: A&HF 6000z and A&HF 6100z. 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 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 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 Required.

A&HF 6900. Advanced research in philosophy and education (1–6)

Faculty. Permission 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)

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/post-structuralism, semiotics, discourse and film analysis, psycholanalysis, ideology-critique, identity politics, feminism, queer theory.

*A&HF 4065. Media and visual culture (2–3)

Dr. Ellsworth. 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.

*A&HF 4088. Popular culture 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, daterape, demonism, guns and bombs, in reality, art, and fiction. Special fee: \$40.

Religion and Education

(Code: TFU)

Program Coordinator: Dr. John Kuentzel

Program Advisors: Professor Mary Boys, Union Theology Seminary; Professor Joseph Lukinsky, The Jewish Theological Seminary

Degrees offered:

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

* The program is currently not accepting applications for this degree level. Please call the Office of Admission at (212) 678-3710 for updated information.

Special Application Requirements/Information: Students may not begin program in the summer.

Program Description:

For three quarters of a century Teachers College has offered advanced studies of various fields related to religion and education. Today, the program in religion and education, leading to the M.A., Ed.M., and Ed.D. degrees, offers the opportunity for combining religious studies at Union Theological Seminary, the Jewish Theological Seminary of America, and the Columbia University Graduate School of Arts and Sciences with studies in education at Teachers College.

Many students in the program, particularly at the doctoral level, transfer substantial credits in graduate or professional religious studies from other institutions and devote the major part of their effort in the program to acquiring the educational knowledge and skills needed to complement their previous theological study. Each student's program is worked out to meet his or her particular objectives, using the combined resources of Teachers College and the other institutions mentioned above.

The program prepares its graduates to teach in colleges, universities, and theological schools, with special concern for the religious dimensions in education. Such persons would also be prepared to teach courses in religion or to serve with various religious organizations in positions of leadership in matters of educational policy.

For information about the joint Ed.D. program and the related Master of Arts in Education and Theological Studies at Union Theological Seminary, consult the Seminary's catalog.

Degree Requirements:

The program of courses in Religion and Education is worked out with one of the advisors from the three cooper-

ating 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.

Master of Arts

The degree requirements can be met in one of two ways: 1) completing 30 points and a formal master's thesis, or, 2) completing 32 points and a special project. The topics and preparation of the thesis and the special project are to be determined in consultation with the student's advisor. At least 12 of the points taken for the degree must be in the field of religion and education, and at least three Teachers College courses must be taken outside the program.

Doctor of Education

The Doctor of Education is a 90 point program. All students must take a minimum of 6 points of A&HR 6581, Studies in Religion and Education. The full program of other courses is developed on an individual basis for each student in consultation with the advisors of the program.

In developing the full course program, every effort is made to ensure that students receive a solid grounding in the nature of religion (with courses in fields pertaining to literature of religion, history of religions, philosophy of religion and theology, social science and religion, and psychology of religion).

Students also receive a solid grounding in the nature of education (with courses pertaining to history and education, philosophy and education, anthropology and sociology of education, international education, curriculum and teaching and adult education).

Other courses deemed important for the student's particular goals in the study of religion and education also become part of the course program. Further detailed requirements for the Ed.D. are available from the Office of Doctoral Studies. 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)

*A&HR 4171-4172 Religion and education in American culture (2–3)

Dr. 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)
Dr. Keuntzel. 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) 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 Seminary as RE 505-506 and at Jewish Theological Seminary as Ed. 9547.

Individualized Studies

A&HR 4901. Research and independent study (1–8) Permission only.

A&HR 7500. Dissertation seminar in religion (0–3) Faculty. Permission required. Required of doctoral students in the semester following successful completion of certification examinations.

A&HR 8900. Dissertation advisement in religion (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 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.

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. Indtroduces 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.

Social Studies

(Code: TLW)
Program Coordinator: Professor
Margaret Smith Crocco
Website: www.tc.columbia.edu/
academic/social

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

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 only. Ed.M. students may begin in any term.

Students should indicate on the specialization section of application whether they wish to pursue teacher certification. A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

Applicants to the Master of Arts degree program must have taken at least 24 credits in history or appropriate social science course work. For those courses that are not listed under a history department, and which the applicant feels may be counted as part of the "history" requirement, applicants must submit course descriptions in order for the social studies faculty to determine the content. M.A. inquiries should be directed to Mr. Michael Marino, Social Studies Program Office, Box 80, (212) 678-3173. The program secretary for Social Studies can be reached at (212) 678-4083.

Applicants to the Master of Education degree should be aware that the Program admits students after several years of teaching or after completion of an M.A. degree in Social Studies education or in an appropriate content field. Admission requirements in terms of undergraduate background are the same as the M.A.

An M.A. in appropriate content field or Social Studies education is required for applicants to the Doctor of Education or

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 the potential for doctoral-level work. If the applicant will be in or near New York City, an interview is recommended.

Inquiries for the Ed.M., Ed.D. and the Ph.D. degrees should be directed to Professor Margaret Smith Crocco, Box 80, Teachers College; telephone: (212) 678-3174.

Program Description:

The Social Studies Program combines history and the social sciences for purposes of instruction. The program particularly emphasizes the historical development of the field, the selection and organization of subject matter, and analysis of instructional materials for students of diverse backgrounds in both urban and suburban school settings.

Social studies teachers must be schooled in subject matter, practiced in the arts of pedagogy, 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. Our faculty's strengths in history and social education are well suited to that purpose. These strengths, along with the full resources of Teachers College and Columbia's Graduate School of Arts and Sciences, are available to every student.

Degree Requirements:

Master of Arts

The Master of Arts offers the following two tracks:

Master of Arts in Social Studies

This program requires a minimum of 32 points and an integrative project. This degree program focuses on social studies teaching in middle and high schools, and is designed primarily for in-service teachers. The 32 points should be distributed as follows:

Methods and Materials (6–9 points minimum)

- A&HW 4036, The teaching of social studies (required)*
- A&HW 5030, Diversity and the social studies curriculum
- A&HW 5035, History of the social studies since 1880
- A&HW 5037, Alternative models of social studies curriculum
- A&HW 5530, The history of American social thought

*Students who have taken an equivalent course should substitute A&HW 5037.

Social Studies Content Courses (14–17 points)

In consultation with an advisor, students should select courses to round out their knowledge of the subject matters taught in secondary schools.

Professional Development Courses (6–9 points)

Three 2–3 point Teachers College courses outside the Social Studies Program, chosen with advisor approval.

Further Requirements
Students must complete an integrative project, selected with advisor approval.

Master of Arts in Social Studies with Teacher Certification

This program requires a minimum of 38 points and an integrative project and is designed for pre-service teachers. Successful completion of this program of study leads to the M.A. degree and recommendation for New York State teacher 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 school to which the student is assigned supervises and evaluates the student teacher's work. This program is registered by New York State.

Although it is possible to complete this program in one calendar year of four terms, the faculty strongly advise students to extend the program to include two full summers as well as one regular academic year of two terms.

The 38 points should be distributed as follows:

Foundations and Methods (9–12 points)

Applicants must have 2 or more points in history and/or appropriate social sciences.

- A&HW 4036, The teaching of social studies (required)
- A&HW 5030, Diversity and the social studies curriculum*
- A&HW 5035, History of the social studies since 1880
- A&HW 5037, Alternative models of social studies curriculum
- A&HW 5530, The history of American social thought

Social Studies Content Courses (14–17 points)
Same as 32 point M.A. program. See above.

Student Teaching (10 points)

- A&HW 4530, Seminar for student teachers in social studies*
- A&HW 4730, Supervised student teaching in social studies**

*Students enroll for 2 points both in the fall and in the spring.

** Students enroll for 3 points in both the fall and the spring.

Professional Development Courses (6–9 points)
Same as 32 point M.A. program. See above.

Student teaching for non-Social Studies majors:
Students registered in programs at Teachers College other than the Social Studies program who wish to student teach must get written permission from the program coordinator by March 1 prior to the

fall term in which student

teaching begins.

Students who want to teach in the Social Studies program must also meet these additional requirements: first take A&HW 4036, The Teaching of Social Studies, and then, enroll for A&HW 4530, the Seminar for student teachers in social studies and A&HW 4730, Supervised student teaching in social studies, during both the fall and spring terms.

Further Requirements
Students must complete an integrative project, satisfy the requirement for study of a language other than English, and register for and attend the teacher education lectures on detection of child and substance abuse.

Master of Education

The Master of Education in Social Studies offers the following three tracks:

Master of Education in Social Studies

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 middle and high schools, community colleges, curriculum agencies and publishing, and foundations and historical 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 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-ofprogram courses may be used to satisfy points requirements in this area.

- A&HW 5030, Diversity and the social studies curriculum
- A&HW 5035, History of the social studies since 1880
- A&HW 5037, Alternative models of social studies curriculum
- A&HW 5203, Fieldwork in social studies**
- A&HW 5223, Oral history as a multidisciplinary teaching tool

- A&HW 5232, Fieldwork in social studies teacher training.
- A&HW 5530, The history of American social thought
- A&HW 5931, Guided investigations in the teaching of social studies**
- A&HW 6530, Curriculum development, research, and supervision**

**May be taken more than once

Social Studies Content Electives (15 points minimum)
Same as for M.A. See above.

Professional Development Courses (6–9 points minimum)
Same as for M.A. See above.

Further Requirements
The integrative project will develop out of the student's particular program of study.
Students will register for A&HW 6030, Research in social studies education, with an advisor to conceptualize and begin to prepare this project.

The Master of Education in Social Studies with New York State Certification in Administration and Supervision

This program requires a minimum of 60 points and an integrative project.

Social Studies Foundations, Methods, and Professional Content (18 points minimum)
Except for A&HW 6530, same choices as Ed.M. above.

Public School Administration (12 points required)
Courses selected in consultation with an advisor.

Public School Supervision (12 points required)
Required:

 C&T 4051, Supervision for elementary and secondary schools A&HW 6530, Curriculum development, research, and supervision

Suggested:
Consult an advisor

Internship in supervision (4–6 points over two terms)

• C&T 6542, Internship program in supervision (in-service)

Guidance in development of integrative project (3 points)

• A&HW 6030, Research in social studies education

Electives (9–11 points) Must include courses in both social studies content and professional development. Chosen with advisor approval.

Further requirements
Same as for Ed.M. above.

The Master of Education in Social Studies and the Teaching of English to Speakers of other Languages (TESOL)

Please write the program secretary at Box 80 for more information.

Doctor of Education

The Doctor of Education in Social Studies requires 90 points of graduate study and a dissertation. The Ed.D. degree program emphasizes broad preparation for advanced professional responsibilities in social studies.

Courses in the major field (15 points minimum) Required:

- A&HW 5031, Teacher education in social studies
- A&HW 5035, History of the social studies since 1880
- A&HW 5037, Alternative models of social studies curriculum
- A&HW 5232, Fieldwork in social studies teacher training
- A&HW 5530, The history of American social thought

- A&HW 6500, Seminar in the history of the social studies
- A&HW 6530, Curriculum development, research, and supervision

Research courses, seminars and individualized work (15 points minimum)

Required:

- A&HW 5503, Research paper in social studies
- A&HW 6503, Doctoral seminar in social studies
- A&HW 7503, Dissertation seminar in social studies

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 three areas: the nature of education, the nature of persons and the learning process, and, methods of evaluation and research. Other course work in this area should be tailored to the individual student's needs; consult an advisor.

Electives 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 both the subiect matters themselves and the design and evaluation of 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

The Doctor of Philosophy in Social Studies requires 75 points of graduate study and a dissertation. The Ph.D. program emphasizes research and intensive specialization in social studies scholarship.

Courses in the major field (15 points minimum)

- A&HW 5031, Teacher education in social studies
- A&HW 5035, History of the social studies since 1880
- A&HW 5232, Fieldwork in social studies teacher training
- A&HW 5530, The history of American social thought
- A&HW 6500, Seminar in the history of the social studies
- A&HW 6530, Curriculum development, research, and supervision

Electives in the area of specialization (15 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 (15 points minimum)
Required:

• A&HH 6041, Historical method

Altogether students must complete a minimum of 15 points in research methods course work. The sequence of doctoral preparation seminars is the same as for the Ed.D.

Non-major foundations (15 points minimum)
Same as "Broad and basic areas of professional scholarship" in Ed.D.

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. Special fee: \$10.

A&HW 4530. Seminar for student teachers in social studies (2)

Faculty. Must be taken concurrently with A&HW 4730. Restricted to majors. Special fee: \$20.

A&HW 4730. Supervised student teaching in social studies

Professor Crocco and Faculty. Permission required. Must be taken concurrently with A&HW 4530. Restricted to majors. Special fee: \$20.

A&HW 5030. Diversity and the social studies curriculum (3) Professor Crocco and Faculty. 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. Special fee: \$10.

A&HW 5031. Teacher education in social studies (1–3) Professor Thornton. Permission required. Problems, issues, and new directions in college teaching of methods courses. Supervision of practice teaching and other professional programs.

A&HW 5035. History of the social studies since 1880 (3) Professor Thornton. 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

Faculty. Examination of alternatives to dominant approaches to social studies. Suitable for experienced teachers interested in advanced methodology.

*A&HW 5530. The history of American social thought (3) Professor Crocco. The history of American social thought as it has influenced and been influenced by theories of education and patterns of educational practice.

A&HW 6500. Seminar in the history of the social studies (3) Professor Thornton. Permission required. Individual and group investigation and group discussions of such topics as listed in A&HW5035, which is ordinarily a prerequisite.

A&HW 6530. Curriculum development, research, and supervision (3)

Professor Thornton. Aspects of curriculum; teaching and learning processes; attention to problems and techniques of supervision. For advanced students interested in the analysis and evaluation of educational programs and methods of instruction.

Social Studies Content

A&HW 4030. The study of history (3)

Professor Thornton. Methods of historical analysis and interpretation. The discipline of history and its relationship to the social sciences. Suggested for all social studies majors; required for those who were not history majors.

*A&HW 4032. The study of world history and geography (2–3)

Faculty. Particular attention paid to problems of conceptualization and interpretation involved in organizing and teaching world history with an emphasis in geography.

A&HW 4033. History of Europe since 1914: selected topics (3) Faculty. Main themes and problems in the teaching of recent European history. Topics: World War I, totalitarianism, World War II, the new Europe, social and intellectual change.

A&HW 4035. New York City as a learning laboratory (1–3) Faculty. New York City's cultural, social, governmental, business, financial, medical institutions, neighborhoods, green spaces studied through field experiences.

A&HW 4037. East Asia: survey of modern history and culture (2–3)

Dr. Martin. An overview of central themes in the modern history and culture of China, Japan and Korea.

A&HW 4038. The study of American history and geography.

Illustrative themes in American history and geography for middle and high schools; students may elect to concentrate on either or both levels. Applications to curriculum design and instructional materials.

A&HW 4039. The United States Constitution (2–3)

Dr. Tischler. Course includes 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.

*A&HW 4040. Women of the world: Issues in teaching (2–3) Professor Crocco. Women's lives (e.g., Africa, China, Latin America) past and present provide text for the course. Students' stories as told via oral/family history supplement. Reconceptualizing the history curriculum is a dominant theme. Special fee: \$10.

Doctoral preparation

Doctoral preparation involves three successive stages:

- 1. Exposure to basic research methods,
- 2. Identification of dissertation topic,
- 3. Presentation of a prospectus. In order to encourage doctoral students to progress through these stages, a sequence of seminars is customarily offered. Progress through these stages usually involves enrollment in the following courses:
- A&HW 5503, Research paper in Social Studies (1–3)
- A&HW 6503, Doctoral seminar in Social Studies (1–3)
- A&HW 7503, Dissertation seminar in Social Studies (1–2)
- A&HW 8903, Dissertation advisement in Social Studies (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&HLW 4903. Research and independent study in social studies (1–6)

Faculty. Permission 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 required.
Opportunity for qualified students,

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 (0-2)

Professor Crocco. Permission required. Students will learn the steps of oral history design for the classroom, including research, selection of interviewees, contact and context, conducting the interview, transcribing, reviewing, editing and processing. Special fee: \$30.

A&HW 5232. Fieldwork in social studies teacher training (2–3)

Professor Crocco. Permission required. For advanced students engaged in supervision of student teachers. Supervised field work, individual conferences, and group seminar.

A&HW 5430. Internship in the teaching of history and social sciences (1–3)

Faculty. Permission and advance application required. Ordinarily in secondary schools, junior colleges, teacher training programs or publishing work.

A&HW 5931. Guided investigations in the teaching of social studies (1–3)

Faculty. Permission 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 required.

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

A&HW 6403. Internship in college teaching in social studies (1–6)

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

A&HL 6935. Studies in history and in the teaching of history and social studies (1–3)
Faculty. Permission required. Individual research and advanced historical method ordinarily related to a doctoral dissertation.

See also:

A&H 5500. Pro-seminar in arts and humanities (2)

Faculty. Concentration on the ethics of social research, examining special problems that arise in both quantitative and qualitative research.

Teaching of English

(Code: TLE)

Program Coordinator: Professor Janet L. Miller Website: www.tc.columbia.edu/ academic/english

Degrees offered:
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Education
(Ed.D.C.T.) in the College
Teaching of English
Doctor of Philosophy (Ph.D.)

in English Education

Special Application Requirements/Information: The M.A. degree in English Education is designed for students who plan to teach or are currently teaching. Applicants are required to submit official transcripts from all undergraduate institutions attended, two letters of recommendation, and a personal statement. Applicants should complete at least 24 undergraduate and/or graduate credits in English, or equivalencies, prior to entering the program. Applicants for certification will need, at the time of graduation, 6 points of study at the undergraduate level in a foreign language. Waivers for second language fluency are available.

The Ed.M. degree in English Education 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. Ed.M. applicants are required to submit a writing sample, must have earned an M.A. in English, English Education, or in an analogous field, and must have teaching experience at the secondary classroom level. A personal interview with a faculty advisor is required.

The Ed.D., Ed.D.C.T., and Ph.D. degrees in English Education combine course and fieldwork for teachers who: 1) have the desire to examine theoretical, research, and pedagogical principles as they apply to practice; 2) wish to prepare prospective teachers or engage in professional development work with in-service teachers; and 3) prepare themselves for leadership roles in the field of teaching English or English Education. Applicants are required to submit a writing sample, must have an M.A. in English, English Education, or in a closely related field, and must have classroom teaching experience. A personal interview with a faculty advisor is required.

Program Description:

Master of Arts

An English teacher creates contexts for reading, writing, representing, performing, listening, and speaking. Classrooms are transitory environments and demand teachers who are aware of themselves as learners, capable of adapting to change, skilled at negotiating multiple literacies, and respectful of diversity.

Our program is committed to the professional development of teachers as they pursue their teaching and scholarly lives. We recognize and value the variety of needs and experiences of a diverse student body, and we strive to provide our students with individualized programs. This program offers new and experienced educators opportunities for intensive study in disciplined-based content, integrated curriculum, critical literacies, and pedagogies for increasingly diverse student populations.

Our program encourages students to seek a balance between breadth and specialization by offering a variety of pedagogical and content courses. Pedagogical courses focus on ideological and philosophical/ theoretical principles that shape the constructions of curriculum, as well as diverse strategies and methods for the teaching of multiple and critical literacies. Content courses include literature and writing electives that model the various literacy practices useful in teaching secondary students in English classrooms.

Two semesters of student teaching in public urban sites complement the course work in the M.A. with certification degree and provide students with placements at both the middle school and high school levels where they can apply what they are learning in the program.

Master of Education

The Ed.M. in English Education is a 60-point program of study that includes in-depth work in theory and pedagogy as it applies to the teaching of multiple and critical literacies. Up to 30 points may be transferred from previous graduate study at an accredited institution toward the Master of Education degree.

This master's program is designed for individuals interested in advanced study within the field of English Education or in interdisciplinary studies. The degree represents a commitment to research and study of issues in teaching and learning. The Ed.M. is designed for experienced teachers as a way to complement their work in schools and can serve as a preparation program for students who may want to enter the doctoral program. An acceptable special project/thesis is required for the degree (A&HE 5504).

Doctor of Education

The Doctor of Education (Ed.D.), Doctor of Education in the College Teaching of English (Ed.D.C.T.), and the Doctor of Philosophy (Ph.D.) programs in English Education provide theoretical, pedagogical, and research-oriented course work in literacy education. The student will eventually focus on an area of interest for further inquiry. Course work within doctoral programs reflects a range of issues and areas of study within the field.

The program is designed to represent a coherent network of courses. The number of courses required depends, in part, on the number of points transferred from previous graduate work.

Degree requirements:

Master of Arts

The M.A. in English Education is a 36-point program (with certification for pre-service teachers) or a 32-point program (for in-service teachers) and can be completed with full-time enrollment in one academic year plus two summer sessions. For the award of the M.A., a special master's project must be completed.

The 36-point program should be distributed as follows:

Required writing courses:

Take at least one of the following:

- A&HE 4156, Writing: nonfiction
- A&HE 4157, Writing: fiction
- A&HE 4158, Writing:

Required literature courses: Take at least one of the following:

- A&HE 4050, Literature and teaching
- A&HE 4051, Critical approaches to literature

- A&HE 4052, Adolescents and literature
- A&HE 4053, Cultural perspectives and literature
- A&HE 4056, Feminist perspectives and literature
- A&HE 4100, Drama and theater
- A&HE 4561, Teaching narrative and story
- A&HE 5151, Perspectives on popular texts in English classrooms

Required methods courses (9 points minimum):

- A&HE 4057, English methods
- A&HE 4058, Teaching of reading
- A&HE 4150, Teaching literacies in secondary maths, sciences, and the humanities
- A&HE 4151, Teaching of writing

Take at least one of the following:

- A&HE 4152, Literacies and technologies in the secondary English classroom
- A&HE 4155, Critical issues in the secondary English classroom
- A&HE 4550, Teaching of poetry
- A&HE 4551, Teaching of Shakespeare
- A&HE 4552, Curriculum and assessment in the secondary English classroom
- A&HE 5518, Teaching English in diverse social and cultural contexts

Required Student Teaching course work (8 points minimum):

- A&HE 4750, Supervised student teaching of English seminar*
- *Students enroll in A&HE 4750 twice in order to support: 1) a middle/junior high school student teaching experience, and 2) a senior high school student teaching experience. This seminar serves as a forum to address the needs, issues and challenges that may arise during the student teaching experience.

*A&HE 4751 Field work and observation in secondary English (2 points minimum)

*Other New York State requirements are detailed in the M.A. program description.

Required Foundations course work (6–9 points minimum): Any three Teachers College courses that are **not** A&HE. Each Foundations course must be taken for a minimum of 2 points.

Electives:

Any graduate-level course(s) taken at Teachers College and/or Columbia University applied to overall credit requirement for the M.A.*

Special Project (1 point):

 A&HE 5590, Master's seminar: Teaching of English*

*Required by the College of all Master's pre-service students.

The 32-point program should be distributed as follows:

Required writing courses: Take at least one of the following:

- A&HE 4156, Writing: non fiction
- A&HE 4157, Writing: fiction
- A&HE 4158, Writing: poetry

Required literature courses: Take at least one of the following:

- A&HE 4058, Teaching of reading
- A&HE 4050, Literature and teaching
- A&HE 4051, Critical approaches to literature
- A&HE 4052, Adolescents and literature
- A&HE 4053, Cultural perspectives and literature
- A&HE 4056, Feminist perspectives and literature
- A&HE 4100, Drama and theater

- A&HE 4561, Teaching narrative and story
- A&HE 5151, Perspectives on "popular" texts in English classrooms

Required methods courses (13 points minimum):

- A&HE 4057, English methods
- A&HE 4058, Teaching of reading
- A&HE 4151, Teaching of writing

Take at least one of the following:

- A&HE 4155, Critical issues in the secondary English classroom
- A&HE 4550, Teaching of poetry
- A&HE 4551, Teaching of Shakespeare
- A&HE 5518, Teaching English in diverse social and cultural contexts

Required Foundations course work (6–9 points minimum): Any three Teachers College courses that are NOT A&HE. Each Foundations course must be taken for a minimum of 2 points.

Electives:

Any graduate-level course(s) taken at Teachers College and/or Columbia University applied to overall credit requirement for the M.A.*

Special Project (1 point):

- A&HE 5590, Master's seminar in Teaching of English*
- *Required by the College of all master's-level students.

Master of Education

The 60-point program should be distributed as follows:

Research Methods (9 points minimum):

These courses may be taken in any department of Teachers College and may be from either 4000 or 5000 level. Although courses may include both quantitative and/or qualitative methods, we recommend that at least one course represent study in the area of qualitative research.

Foundation courses (6 points minimum):

These courses are intended to broaden knowledge of educational issues and practices beyond those of your particular area concentration. Students must take at least three Teachers College courses (for a minimum of 2 points each) from departments outside of Arts & Humanities. This requirement must be completed while at Teachers College.

Courses within the English Education program (15 points minimum*):

Recommended courses at the 4000 level (no more than 9 points) include:

- A&HE 4050, Literature and teaching
- A&HE 4051, Critical approaches to literature
- A&HE 4052, Adolescents and literature
- A&HE 4053, Cultural perspectives and literature
- A&HE 4056, Feminist perspectives and literature
- A&HE 4057, English methods
- A&HE 4058, Teaching of reading
- A&HE 4100, Drama and theater
- A&HE 4150, Teaching literacies in secondary maths, sciences, and the humanities
- A&HE 4151, Teaching of writing
- A&HE 4152, Literacies and technologies in the secondary English classroom
- A&HE 4154, Rhetoric and teaching
- A&HE 4155, Critical issues in the secondary English classroom
- A&HE 4550, Teaching of poetry

- A&HE 4551, Teaching of Shakespeare
- A&HE 4552, Curriculum and assessment in the secondary English classroom
- A&HE 4561, Teaching narrative and story

Recommended courses at the 5000 and 6000 level (no more than 30 points):

- A&HE 5149, Writing research: methods and assumptions
- A&HE 5150, Practicing research in English education
- A&HE 5151, Perspectives of "popular" literature in the English classroom
- A&HE 5504, Research paper in the teaching of English
- A&HE 5514, Reader's responses: research, theory, and practice
- A&HE 5518, Teaching English in diverse social and cultural contexts
- A&HE 6011, The politics of teaching English
- A&HE 6015, College teaching of English
- A&HE 6450, Internship in the teaching of writing
- A&HE 6514, Postmodern literary theory

*Students must complete between 15–45 credits of study at the 4000, 5000, and 6000 level within the English Education program, depending on how many credits are transferred in. It is possible to substitute a 12–15 credit specialization in another area with advisor's approval. Students transferring up to 30 points should take most of their courses at the more advanced 5000 and 6000 level.

Special project/thesis:

The Ed.M. Thesis represents a refined presentation of the student's research question and area of inquiry; it entails work which 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 thesis includes:

- A&HE 5504, Research paper (1–3 points)
- a) a rationale for the project and demonstration of an understanding of the literature of the field related to the topic(s) undertaken;
- b) a discussion of a pilot study including the methodology that shapes the study;
- c) a critique of the pilot study explaining its significance as well as the research methods employed;
- d) implications relevant to the student's future research

Doctoral Programs

Students working toward a 90-point Ed.D degree are able to transfer a maximum of 40 points from previous graduate study. Ed.D. students will complete at least 50 points within the program to complete their doctoral work.

Students working towards a 75-point Ph.D. degree will also complete a 50-point program and thus may transfer up to 25 points from previous graduate work.

Required doctoral course work within the English Education program (with advisor's approval):

- A&HE 5504, Research paper: Teaching of English (a candidacy paper for Ed.D. and Ph.D. students)
- A&HE 6015, College teaching of English*
- A&HE 6504, Doctoral seminars in the teaching of English (to be taken twice)
- A&HE 7504, Dissertation proposal seminar in the teaching of English
- A&HE 8904, Dissertation advisement in the teaching of English

*For students seeking the Ed.D.C.T.

All course work in the English Education program must be approved by an academic advisor:

- * No courses may be taken toward either the Ed.D. or the Ph.D. that are "R" (attendance) credits and no courses may be taken toward the degree that are "P" (pass/fail).
- * Students must consult their academic advisor when they undertake an independent study, an internship, a practicum, or courses at Columbia University.
- * Doctoral students are strongly discouraged from taking 4000-level courses, and must consult with their academic advisor before registering for these courses.
- * Doctoral students must complete a minimum of 12 credits of research methods courses

Both Ed.D. and Ph.D. students must complete a fifty point program of study, with all courses approved by an academic advisor, to meet the degree requirements for the English Education program. The program of study encompassing these points is designed to represent a coherent network of courses, and it reflects a range of topics in English Education. All areas of study should have consistent emphases within courses on social and political contexts in English Education, and issues of teacher education are always relevant.

Candidates should keep in touch with 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: \$30.

*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: \$30.

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: \$30.

*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: \$30

*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: \$30.

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: \$30.

A&HE 4058. Teaching of reading (3)

Faculty. The course focuses on helping teachers examine theoretical and pedagogical principles relevant to teaching literary and non literary texts with emphasis on the relations of texts and readers. Special fee: \$30.

A&HE 4100. Drama and theater

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: \$30

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

A&HE 4151. Teaching of writing (3)

strated. Special fee: \$30.

promote learning will be demon-

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: \$30.

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: \$60.

A&HE 4154. 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: \$30

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:\$30

A&HE 4156. Writing: nonfiction

Faculty. A non-fiction writing workshop. This course is taught as part of 6 credit block with A&HE 4151. Teaching of writing. Special fee: \$30.

A&HE 4157. Writing: fiction and personal narrative (3) Faculty. A fiction writing workshop. Special fee: \$30

A&HE 4158. Writing: poetry (3) Faculty. A poetry writing class combined with close readings of selected contemporary poets. Special fee: \$30

A&HE 4550. Teaching of poetry (3)

Faculty. Experience in reading and writing poetry, designing curriculum, and determining effective teaching practices. Special fee: \$30

A&HE 4551. Teaching of Shakespeare (3)

Faculty. An examination of diverse theoretical perspectives and pedagogical principles for teaching Shakespeare. Special fee: \$30.

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: \$30.

*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: \$30.

A&HE 4751. Fieldwork and observation on secondary English (1)

Faculty. Permission required. 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: \$30.

A&HE 4904. Independent study in teaching English (1–6) Faculty. Permission required. Research and independent study under the direction of a faculty member. Students work individually or with others. Special fee: \$30

A&HE 5000. Technologically mediated literacies (TML): research and theory in secondary English education (3) Faculty. Advanced course exploring literacy theory relating to the emerging and changing literate practices associated with computing and media technology in secondary English teaching. Pre-requisite: A&HE 4152 or equivalent. Special fee: \$60

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: \$30

A&HE 5150. Research in practice (3)

Faculty. Examines the role of qualitative research in knowledge/production, in teaching and learning. Special fee: \$30

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

Faculty. This course unites poststructuralist 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: \$30

A&HE 5204. Fieldwork in teaching English (1–6)

Faculty. Permission 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. Special fee: \$30

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 "5504" paper representing a refined presentation of a stu-

dent's research question and area of inquiry. Special fee: \$30

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: \$30

A&HE 5518. Teaching English in diverse social and cultural contexts (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: \$30.

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: \$30.

A&HE 6011. The politics of teaching English (3)

Faculty. An examination of political and socio-cultural theories of language, literature, and composition that inform diverse ideological constructions of knowledge, curriculum, and pedagogy in English language arts education. Special fee: \$30

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: \$30

A&HE 6204. Advanced fieldwork in teaching English (1–6) Faculty. Permission required. See description for A&HE 5204. Special fee: \$30

A&HE 6404. Internship in college teaching of English (1–6) Faculty. Permission required. Opportunities to work in college programs. Students must inquire to see if opportunities are available during any given semester. Special fee: \$30.

A&HE 6450. Internship in teaching English (1–3)

Faculty. Permission 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: \$30

A&HE 6504. Doctoral seminars (A and B)

Faculty. Taken twice during a course of studies. Doctoral seminar (A) acquaints students with the uses and history of the field of English Education; Doctoral seminar (B) helps students focus on issues that shape their own research later in their course of studies. Special fee: \$30.

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: \$30

A&HE 6904. Research and independent study (3)

Faculty. Permission required. Advanced research and independent study under the direction of a faculty member. Students work individually or with others. Special fee: \$30

A&HE 7504. Dissertation proposal seminar in teaching English (3)

Faculty. Permission required. Designed to help students shape the writing of the review of literature, research methodology, data analysis and implications of the research. Special fee: \$30.

A&HE 8904. Dissertation advisement in teaching English

Faculty. Permission required. All Ed.D and Ph.D students must be continuously registered for Disser-

tation Advisement until completion of the program.

Teaching English to Speakers of Other Languages (TESOL)

(Code: TLZ)

Program Coordinator: Professor James E. Purpura

Degrees offered:

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

For the most recent information on the TESOL Program, consult the TESOL web page at:

http://www.tc.columbia.edu/academic/tesol/.

For updated information on the Applied Linguistics Program, consult the Applied Linguistics web page at:

http://www.tc.columbia.edu/ac ademic/appliedlinguistics/. For updated information on the TESOL Program in Japan, consult the Tokyo web page at: http://www.tc-japan.edu/.

Special Application Requirements/Information:

Applications will be accepted for the fall and spring priority dates only. Any application received after those dates may 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 related field.

Ed.M. applicants may 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 an additional 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 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.

All non-native speakers of English, including those who have an undergraduate degree from an English-medium university in the U.S. or abroad, must submit either:

- a minimum score of 600 on the TOEFL or a 250 on the computer-based equivalent as well as a minimum score of 5 on the Test of Written English (TWE), or
- a score of B or better on the Cambridge Certificate of Proficiency in English (CEP), or
- a score of 7.0 or better on the Cambridge International English Language Testing System (IELTS).

All non-native speakers of English must also submit either a score of 50 on the Test of Spoken English (TSE) or a score of 50 on the SPEAK Test.

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 US, 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
- Language in the content areas
- ESL/EFL materials development and curriculum design
- Language teacher observation and supervision
- Language teacher education
- Second language acquisition
- Second language assessment
- Language classroom interaction
- Second language literacy
- Language program evaluation
- Technology and language teaching

Graduates from the TESOL program typically teach ESL or EFL 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 program sponsors the Community English Program (CEP) for nonnative English speaking adults from the adjoining community. The CEP serves as an on-site language education lab in which students enrolled in the TESOL program teach the courses, administer the program and use the CEP for empirical inquiry. For more information on the CEP, see their web site at

http://www.tc.columbia.edu/ac ademic/tesol/CEP.htm.

Degree Requirements:

Master of Arts

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

General Track

The TESOL General Track Program offers a 36-point Master of Arts degree for students wishing to teach in any setting 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 4101, Phonetics and phonology (3)
- A&HL 4087, Second language acquisition (3)
- A&HL 4088, Second language assessment (3)
- A&HT 5360-A&HT 5379, Specialized practica for ESOL teachers (minimum of two) (6)
- TESOL workshops (minimum of three at 1 point each)

Required courses out of program (3 courses of at least two points each: 6 points minimum): To be chosen with advisor's approval.

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.

Additional requirement: Comprehensive examination.

K–12 Certification Track
The TESOL K–12 Certification
Program offers a 37-42 -point
Master of Arts degree in TESOL
with New York State Teacher
Certification. This is 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:*

- A&HT 4077, Classroom practices (3)
- A&HL 4101, Phonetics and phonology (3)
- A&HL 4085, Pedagogical English grammar (3)
- A&HL 4087, Second language acquisition (3)
- A&HL 4088, Second language assessment (3)
- A&HT 5360-A&HT 5379, Specialized practica for ESOL teachers (minimum of one) (3)
- A&HT 4076, TESOL methodologies for K-6 (3)
- A&HT 4171, TESOL methodologies for 7–12 (3)
- A&HT 4776, Supervised student teaching (1 semester K–6) (3)
- A&HT 4776, Supervised student teaching (1 semester 7–12) (3)
- A&HT 5205, Fieldwork in TESOL (1 semester K–6) (1)
- A&HT 5205, Fieldwork in TESOL (1 semester 7–12) (1)
- TESOL workshops (minimum of three at 1 point each) (3)
- * Please note that K-12 Certification requirements are subject to change based on the latest New York State
 Certification regulations.

Required courses outside the program (4–6):

- C&T 4504 Child abuse and substance abuse detection and reporting (0)
- A course in special education (2–3)
- A course in bilingual education (2–3)

• One elective course to be chosen with advisor's approval.

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

Additional Requirement: Comprehensive examination.

For New York State Certification, students must pass the required New York State teacher examinations.

Master of Education

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 all the required courses, or their equivalent, from the TESOL M.A. Exemptions based on prior course work must be approved by the professor teaching the course and the faculty advisor.

Required courses (12):

- A&HL 4001, Sociolinguistics and education, or
- A&HL 4104, Discourse analysis, or
- A&HL 5575, Research literacy in applied linguistics and TESOL
- A&HL 6587, Seminar in second language acquisition: acquisitional and cross-cultural pragmatics

Breadth requirement:

Those students who do not already have a degree from Teachers College must take three courses of at least two points each from outside the department. Some courses outside the TESOL or Applied Linguistics programs (6–9).

At least one out-of-program course must be from the following:

- HUDM 4120, Basic concepts in statistics
- HUDM 4122, Probability and statistical inference
- HUDM 4050, Introduction to measurement
- HUDM 5021, Methods of empirical research
- 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

The TESOL Program offers an Ed.D. in TESOL requiring a minimum of 90 points of graduate study. The Ed.D. involves sustained and indepth 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 requirements: concentration requirements, research methods requirements, and doctoral preparation requirements.

Concentration Requirement: Students are required to take a minimum number of points in their concentrations. The exact courses should be decided in consultation with their advisor.

Research Requirements: (12 points)

To ensure that students have the skills to do scholarly research in their area of concentration, they are required to take a minimum of 12 points in research methods, statistics and measurement. Also, depending on the type of dissertation 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:

- HUDM 5021, Methods of empirical research (3)

 Also, choose one of the following:
- MSTF 5000, Methods of inquiry: Ethnography & participant observation (3)
- MSTF 5001, Ethnography & participant observation (3)
- C&T 5502, Introduction to qualitative research in curriculum & teaching (3)
- MSTF 5059, Qualitative research methods for educators (3)

Required Measurement and Statistics Courses:

- HUDM 4050, Introduction to measurement or in consultation with an advisor (3)
- HUDM 4122, Probability and statistical inference or a more advanced course (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 they have reached approximately 45-50 points in the program, and 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 seminar is considered a fundamental venue for socialization into the research culture in our field.

Doctoral students are required to demonstrate research preparedness in a substantive area by passing the research paper (5501 or 5505), the doctoral seminar (6501 or 6505, part 1), and the doctoral seminar (6501 or 6501, part 2). 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 as a part of the dissertation seminar (7501 or 7505) and complete a doctoral dissertation while continuously registered for dissertation advisement (8901 or 8905).

To prepare for these requirements, students will need to take some of the following seminars in consultation with an academic advisor.

- A&HL 5501, Research paper: applied linguistics (1–3 each course) OR
- A&HT 5505, Research paper: TESOL (1–3 each course)

- A&HL 6501, Doctoral seminar: applied linguistics (1–3 each course) OR
- A&HT 6505, Doctoral seminar: TESOL (1–3 each course)
- A&HL 7501, Dissertation seminar: applied linguistics (1–2 each course) OR
- A&HT 7505, Dissertation seminar: TESOL (1–2 each course)
- A&HL 8901, Dissertation advisement: applied linguistics (0) OR
- 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) Professors Hawkins and Walsh. 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 development (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

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) Professor Walsh. Introduction to the systematic observation of teaching in diverse contexts. Special fee: \$20.

*A&HT 4089. Teaching writing to ESL students (3)

Faculty. An introduction to the theory and practice of teaching writing to ESL and EFL students in a wide range of contexts. Special fee: \$20.

A&HT 4171. **TESOL** Methodologies for 6–12 (3)

Professor Hawkins and Walsh. Teaching ESL to secondary students, stressing content area ESL and second language literacy. Special fee: \$20.

*A&HT 4500. Advanced English language study (1–2)
Faculty/Staff. Developmental ESL for non-native speakers of English who wish to improve their academic writing and speaking skills; emphasis on writing research papers or giving oral presentations in graduate seminars or other professional venues. Topics and emphasis change each term.
Course may be taken more than once. Limit 1 point toward TESOL or Applied Linguistics degree.
Special fee: \$20.

A&HT 5577. Language teacher education programs (3) Faculty. Models, practices, and issues in teacher preparation and professional development, including supervision. Special fee: \$20.

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 (3) Professor Walsh and Hawkins. Permission required. A supervised teaching experience for M.A. students who are interested in working toward a New York State teaching certificate in TESOL P–12 (pre-school to 12th grade) and who have not taught ESL in grades P–12 for at least two years, full time. During the terms of practice teaching, students are not permitted to hold full-time jobs. Course is taken twice, once at the elementary level and once at the secondary level.

A&HT 5360-A&HT 5379. Specialized practica for ESL teachers in the Community English **Program** (3 each course) Faculty/Staff. These practica offer a teaching experience in TC's Community English Program (CEP). The course titles of these practica parallel the workshop titles from A&HT 4160-A&HT 4180. Enrollment in one of these specialized practica requires previous or concurrent enrollment in one of the related workshops from A&HT4160-A&HT4180. For example, if a student enrolls in A&HT 5377, Teaching Speaking, previous or concurrent registration of A&HT 4177, a workshop in teaching speaking, is also required.

A&HT 5380. Specialized practica for TESOL teachers: in-service teaching (3)

Faculty/Staff. Permission required. A supervised student teaching experience for M.A. students interested in working toward a New York State teaching certificate in TESOL and who are currently teaching full-time in the public schools.

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. English for specific purposes
- A&HT 4165. English for academic purposes
- A&HT 4166. Computerassisted 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. communicative practice in 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 4570. Classroom strategies for teaching language minority learners (0)
Faculty/Staff. . A workshop designed to help subject area teachers provide linguistic and cognitive accommodations to language minority students in mainstream classrooms. Special fee: \$20.

A&HT 4817-A&HT 4819. Experiences in learning another language (Noncredit 0 or 1 each 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 (Noncredit, 0 or 1 for each workshop) 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 4095. Research and independent study in TESOL (1–6) Professor Han. 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&HT 5205. Fieldwork in TESOL (1–6)

Professor Han. 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&HT 6205. Advanced fieldwork in TESOL (1–6)
Professor Han. 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.

Doctoral preparation

A&HT 5505. Research paper: TESOL (1–3 each course) A&HL 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) See also 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 4901. Research and independent study: applied linguistics (1-6) 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 5519. Instructed SLA and Assessment (3) A&HL 5575. Research literacy in applied linguistics and TESOL (3) A&HL 6087. Advanced SLA (3) A&HL 6201. Advanced fieldwork in applied linguistics 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&HL 7501. Dissertation seminar: applied linguistics (1-2 each

Teaching English to Speakers of Other Languages (TESOL -Japan)

A&HT 8901. Dissertation

advisement: applied linguistics

(Code: TLX) Program Coordinator: Dr. Terry Royce

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. This program, as an extension of the New York TESOL program, provides opportunities for current teachers of English to earn an M.A. while teaching 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. The program consists of courses, workshops and practica offered during the summer and spring vacations as well as on Saturdays and Sundays throughout the year. All offerings are in English. Applicants can apply to start the program in February or July each year.

For those interested in the offcampus TESOL M.A. in Tokyo, contact: Dr. Terry D. Royce, Director of the MA in TESOL Program, 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> (Program Director—Dr. Terry

(Program Director—Dr. Terry Royce) <office@tc-japan.edu> (Office Manager—Ms Mariko Inoue) Website: http://:www.tcjapan.edu

Teaching of Spanish

(Code: TLS)
Program Coordinators:
Master's level: Jennifer Eddy
Doctoral level: Gerardo Pina
Rosales

Degrees offered:

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

*This program is currently not accepting applications for admission. For updated information about the program, please call the Office of Admission at 212-678-3710.

Special Application Requirements/Information: Functional proficiency in Spanish required for all degree applicants, evaluated by the adviser through interview, correspondence or writing sample.

M.A.: An undergraduate major in Spanish, or 24 college credits in the language, or the equivalent via examination, by the end of the first semester at Teachers College.

Where the fulfillment of admission requirements is questionable or incomplete at the time of registration, probationary acceptance into the program is often possible. It is also permissible to begin studies (up to 16 credits) before being formally accepted into a degree program, while admission documents are being processed.

M.A. with Teacher Certification: same as for the M.A. A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog. Ed.M.: An M.A. degree that includes at least 12 graduate credits in Spanish. Application may be made to transfer up to 30 credits from other graduate studies.

Ed.D.: An M.A. in Spanish or equivalent including 12 graduate-level credits in Spanish. Admission should not be confused with doctoral certification. Admission permits a student to study towards a doctorate, usually passing through the Ed.M. degree. (Certification means that the students, after admission to the doctoral program, has success-

fully completed the formal research paper (A&HS 5506) and has passed the comprehensive certification examination. These tasks are usually undertaken after some 15 credits of course work.)

Two writing samples, one in English, one in Spanish, must be submitted. Students who are not native speakers of English must present 600 on the TOEFL (English) examination or equivalent (250 computer; 10 English Language Proficiency, etc.). Proficiency in Spanish must be demonstrated.

Ed.D.C.T. (College Teaching): coincident with the Ed.D.

Ph.D.: The M.A. in Spanish, writing samples and demonstrated language proficiency, as for the Ed.D. Application may be made to transfer credits from other institutions.

The Ph.D. requires acceptance by a special University Committee of Columbia, in addition to the usual admission by Teachers College. Where no problem is anticipated, and where the Ed.D. or Ed.D.C.T. constitute acceptable alternatives in the event of problems exclusive to Ph.D. requirements, students admitted to Teachers College may begin their studies before their documents are examined by the University Committee.

Program Description:

The program is concerned both with training high school and college teachers of Spanish and with preparing professionals proficient in a foreign language for non-teaching settings. Courses embrace both methods and content and address the areas of language, culture, and literature.

The Teaching of Spanish program draws upon other programs at Teachers College and

the Graduate School of Arts and Sciences of Columbia University to make available to students individually formulated programs with emphases in Bilingual Education, Linguistics, English as a Second Language, or more than one foreign language.

Experiential Opportunities: Internships in distance learning, field projects, and teaching community service courses in conversational Spanish for adults are some of the opportunities that add to the flexibility of Spanish language study at Teachers College. Such activities are planned in conjunction with each student's advisor. Weekend workshops, visiting lectures, and special minicourses of two to eight weeks duration are listed in semester bulletins; they provide a variety of special topics and skills for Spanish language majors and teachers in the field.

The following Hispanic literary societies hold their meetings, readings, and special events at Teachers College, enriching the cultural experience of Spanish majors: Academia Norteamericana de la Lengua; Academia Iberoamericana de Poesia; Asociación Puertorriqueña de Escritores; Circulo de Poetas y Escritores Iberoamericanos; Arregni Memorial Foundation; Fundación Cultura Hispánica de los Estados Unidos.

Degree Requirements:

Master of Arts

A total of 32–36 points plus a project, research paper or comprehensive examination. Credits from other institutions are not transferable at the Master of Arts level.

Out of the total, requirements include:

• 15 points in Spanish, including at least one course at the

- Columbia Graduate School of Arts and Sciences
- 6 points in methods (consult with advisor)
- 3 points in linguistics
- 3 TC courses outside the major

Of the foregoing, three courses are specific requirements for the M.A., including:

- A&HS 4049, Spanish methods and class management
- A&HS 4069, Spanish pronunciation and intonation for teachers, and
- A&HS 5061, Advanced Spanish syntax

For teacher certification, A&HS 4760, Supervised practice teaching (4 points), is required, generally to be taken in the last spring semester at both middle and high school levels. Students seeking certification should consult with the Registrar concerning the latest requirements.

An average of B in all major courses and a comprehensive examination are required for the M.A.

Master of Education

If the M.A. is not from Teachers College, s/he will be expected to include in her/his Ed.M. program requirements for the M.A. (see above), where the equivalents do not appear on the transcript of the transferred master's degree. A minimum of 60 points of graduate course work, of which no less than 30 must be taken through Teachers College. Application may be made to transfer a limited amount of credits from other graduate studies. After course work, a project, research paper or a comprehensive examination must be completed.

Doctor of Education

A total of 90 credits beyond the B.A. are required. Application may be made for the transfer of

credits from other institutions. In addition to the usual content courses, doctoral students are expected to give particular attention to cultural programs sponsored by the Teaching of Spanish Program, as well as to Internship and teaching opportunities at the College.

After doctoral certification (achieved through the Certification Examination and the formal research paper of A&HS 5506, for 1-3 credits and a letter grade) and most of the course work, preparation for the dissertation includes two "seminars" (no class sessions): A&HS 6506 which is the determination of the dissertation topic and the writing of a thesis proposal or prospectus (1-3 credits, P or F grade); and A&HS 7506 which is the presentation and acceptance of the proposal (1-2 credits, P or F grade).

Following the semester of registration in A&HS 7506, the student must enroll in the noncredit A&HS 8906, Dissertation Advisement, in which continuous registration is generally required until achievement of the degree.

The dissertation committee consists of two or three faculty members; the doctoral jury will consist of four professors. Candidates must be in touch with the Office of Doctoral Studies to be certain of complying with procedures, deadlines and documents.

Doctor of Education in the College Teaching of an Academic Subject

While all doctorates are most meaningful for teaching at the college level, this specialized degree suggests to employing institutions a particular expertise. The appropriate emphasis is achieved in the course of study via:

a) at least two courses in Higher Education (catalog

DEPARTMENT OF ARTS AND HUMANITIES

ORLD), such as (but not only):

ORLD 4040. The American college student

ORLD 4051. How adults learn

ORLD 4053. Facilitating adult learning

ORLD 4820. Cultural diversity training in higher education settings; plus

b) at least one supervised semester of A&HS 6406, Internship in college teaching of Spanish, generally arranged on campus, with Distance learning Spanish or Conversational Spanish classes.

It will be anticipated that the dissertation defended for this degree will be especially relevant to adult-level Spanish education.

Doctor of Philosophy

75 graduate credits. A special Ph.D. examination in a foreign language must be taken at the Graduate School of Arts and Sciences.

Note: Successful completion of course work, the Certification Examination, and the formal research paper (A&HS 5506) permits the candidate to apply for the M.Phil. status (in lieu of the doctoral certification for the Ed.D.). 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)

*A&HS 4049. Spanish methods and class management (2) A "hands-on", practical survey of objectives, strengths and weaknesses of the principal approaches to foreign-language teaching. Special problems of multi-cultural settings will also be explored. Special fee: \$20.

A&HS 4069. Spanish pronunciation and intonation for teachers

Required for the M.A. degree. Conducted in Spanish. Standard and regional Spanish phonology; contrasts with English; pedagogical problems.

*A&HS 4070. Cultural traditions and achievements in Hispanic America (2–3)

An examination of the values and traditions of Hispanic America or of a specific country, as reflected in literature and language, education, government, and fine arts. Topics change; course may be repeated.

*A&HS 4072. Humanities in the Hispanic world: Selected topics (2–3)

This course is generally conducted in Spanish, but all work is acceptable in Spanish or English. Sample semester topics: Jose Ortega y Gasset; Lessons from Revolutions (Mexican, Cuban, others); The Arts in the Golden Age (Spain); Miguel de Unamuno; Gabriel Garcia Marquez; Dario and the Modernists.

A&HS 4760. Supervised teaching of Spanish in secondary schools (4)

Generally taken in the final spring semester at both middle and high school levels. During the practice teaching period a coordinate seminar meets periodically a the College.

A&HS 5061. Advanced Spanish syntax (3)

Required for the M.A. degree. Conducted in Spanish. Intensive study of contemporary Spanish syntax; contrasts with English; pedagogical implications.

A&HS 5062. Techniques and problems of translation (English-Spanish) (3)

Primarily for Spanish majors and native speakers of Spanish majoring in English or the teaching of English to Speakers of Other Languages. The use of translation in language teaching; translating literature (prose and poetry); considerations of commercial and technical translation.

A&HS 5064. The teaching of Spanish literature (3)

Conducted in Spanish. Methods and problems in teaching various forms of Spanish literature in the light of aesthetics, stylistics, and the general character of the Spanish or Spanish-American culture in which the literature arises. First half of semester devoted to prose; second half to poetry.

A&HS 5070. Stylistics and writing in Spanish (3)

Conducted in Spanish. Designed to upgrade writing skills as well as assist teachers in the teaching of composition in Spanish.

A&HS 5565. Advanced seminar in historical Romance linguistics (3)

Permission required. Generally for students beyond the Master's level. Development of Romance languages from the Indo-European family, with major stress on the evolution of the languages in which the seminar students are specializing. Some contrast made with the evolution of English. Independent work assigned to each student in his or her language specialization.

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 program (1–3)
- A&HS 6506. Doctoral seminar in the Teaching of Spanish Program (1–3)
- A&HS 7506. Dissertation seminar in the Teaching of Spanish Program (1–2)
- A&HS 8906. Dissertation advisement in the Teaching of Spanish program (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 4906. Research and independent study in teaching of Spanish (1–6)

Research and independent study under the direction of a faculty member. Students work individually or with others.

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 required. See description for A&HL 5206.

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

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.

Chair: John H. Saxman
Location: 1159 Thorndike Hall
Telephone Numbers:
Department Secretary, (212)
678-3895
Department Chair, (212) 6783892
Email: ywallace@exchange.tc.
columbia.edu
(Department Secretary)
Email: jhs37@columbia.edu
(Department Chair)
Fax: (212) 678-8233

Programs:

Movement Sciences and Education Neurosciences and Education Speech-Language Pathology and Audiology

Faculty:

Professors:

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

Visiting Professors

David Lefkowitz (Neurosciences and Education; Speech-Language Pathology)

Adjunct Professors:

Judy Gravel (Audiology)
Steven Heymsfield (Movement
Sciences: Applied Physiology)
Lorraine Ramig (SpeechLanguage Pathology, Neurosciences and Education)
Xavier Pi-Sunyer (Movement
Sciences: Applied Physiology)
Jaclyn Spitzer (Audiology)
Richard Stein (Movement Sciences: Applied Physiology)
Ronald Tikofsky (SpeechLanguage Pathology, Neurosciences and Education)

Associate Professors:

Andrew M. Gordon (Move-

ment Sciences: Motor Learning and Control, Neurosciences and Education)
Peter Gordon (Speech-Language Pathology, Neurosciences and Education)
Honor O'Malley (Audiology, Neurosciences and Education)
Patricia M. Sweeting (Speech-Language Pathology)

Adjunct Associate Professors:

Sergei Yu Aleshinsky (Movement Sciences: Motor Learning and Control)

Dympna Gallagher (Movement Sciences: Applied Physiology)

Terry Kaminski (Movement Sciences: Motor Learning

Andrew McDonough (Movement Sciences: Motor Learning and Control)

and Control)

Roger A. Muzii (Movement Sciences: Motor Learning and Control)

Lori Quinn (Movement Sciences: Motor Learning and Control)

J. Joan Sheppard (Speech-Language Pathology, Neurosciences and Education) Karen B. Wexler (Speech-

Language Pathology)

Assistant Professors:

Maria Grigos (Speech-Language Pathology) Rupal Patel (Speech-Language Pathology, Neurosciences and Education)

Adjunct Assistant Professors:

Mark Budde (Speech-Language Pathology) Catherine Crowley, (Speech-Language Pathology) Karen Reznik Dolins (Movement Sciences: Applied Physiology) Albert Kovera (Movement Sciences: Applied Physiology) Steven Lichtman (Movement Sciences: Applied Physiology) Ashwini K. Rao (Movement Sciences: Motor Learning and Control) Adrienne Stevens Zion (Movement Sciences: Applied Physiology)

Cynthia S. Cohen (Speech-

Instructors:

Language Pathology)
Carol M. Kaufman (Speech-Language Pathology)
Iris A. Klatsky (Speech-Language Pathology)
Sally McGoldrick (Movement Sciences: Motor Learning and Control)
Gail Morris (Speech-Language Pathology)

Carol Tompkins (Speech-

Language Pathology)

Clinical Staff:

Kathy Gross (Speech-Language Pathology) Gloria Anderson-Ballard (Speech-Language Pathology)

For information about faculty and their scholarly and research interests, please refer to the "Faculty" section of the Catalog.

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 life span.

Graduates of our master's programs assume professional roles in educational, health-related, and community agency set-

tings 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-language and Hearing Center, as well as laboratories in applied physiology, motor learning and control, kinematics, speech physiology and acoustics, and psychoacoustics.

The master's degree program in Speech and Language Pathology is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA). The Edward D. Mysak Speech and Hearing Center is accredited by the Professional Services Board of ASHA.

Courses:

BBS 4032. Neuroscience of human speech and language (2) Professor Patel. This course combines lectures and laboratory learning to provide an understanding of the neuroscience of human communication.

BBS 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.

BBS 4050. Applied biomedical instrumentation (3)

Faculty. Permission required. Electronic instrumentation for detection and characterization of physiologic phenomena. Basic elements of instrumentation arrays, including transduction, signal conditioning, and output displays. Evaluation of displacements, force EMG, ECG, and ventilatory parameters. Has special relevance to students in motor learning and control, and applied physiology.

BBS 4065. Biological and behavioral basis of sleep (3)

Faculty. This course is designed to introduce students to the biological and behavioral mechanisms responsible for sleep, dreaming, and attention. Lab fee: \$30.

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.

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 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 and control, exercise physiology, and speech. Topics include posture, balance and breathing, respiratory control of upper airway muscle activity, neural basis of exercise hyperpnea.

See also:

MSTC 5000. Neurobiology of consciousness, constructivism and information processing

Program in Movement Sciences and Education

Applied Physiology

(Code: TRA)

Program Coordinator: Professor DeMeersman

See application requirements and program descriptions below.

Motor Learning and Control

(Code: TRM)

Program Coordinators: Professors Gentile and Gordon See application requirements and program descriptions below.

Physical Education

(Codes: TRP & TRC) Program Coordinator: Stephen Silverman See application requirements and program descriptions on page 152.

See also: The interdepartmental program in Applied Physiology and Nutrition in the Department of Health and Behavior Studies.

Degrees offered: Master of Arts (M.A.) Master of Education (Ed.M.)

Doctor of Education (Ed.D.)

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.

Students seeking admission to the doctoral 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 and control 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 minority scholarship awards is given to those applicants who meet the priority deadline. Prior to formal admission,

enrollment in up to 8 points of study as a non-matriculated student is permitted.

Program Description: There are three specialties in Movement Sciences:

Applied physiology deals with the physiological effects of exercise, training, and arousal (autonomic nervous system functions, such as, cardiovascular processes and sleep regulation). Application of study in applied physiology is made to the improvement of health and physical fitness. Interaction with nutritional factors is also emphasized. Professionals can gain insight into the role of exercise in diagnosis and treatment of health problems of interest to them.

In motor learning and control, study focuses on the behavioral, biomechanical and neural bases of development, acquisition and performance of functional movement skills. Acquisition of skill is examined over the 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.
- 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 clinical/educational applications.
- 5. Elective courses to meet specific student needs which may be taken throughout the College and University in such areas as anatomy, biology, business, chemistry, computer science, health education, higher and adult education, neurosciences, nutrition, physiology, psychology and science education. A list of recommended elective and related courses is available to students in the Movement Sciences office.

Degree Requirements:

Master's Degree Programs

For the M.A. and Ed.M. programs, students have two options. They may specialize in one of the three areas offered within Movement Sciences 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 Professor Gordon. 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:

- BBS5068, Brain and behavior I: communication in the nervous system (1–2)
- BBS 4060, Neuromuscular response and adaptation to exercise (2)
- BBSR 5582, Research design in the movement sciences (3)
- Substantive study in movement sciences including offerings in physical education in the Department of Health and Behavioral Studies (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 courses 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 and control.

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

- BBS 4060, 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, 5505, 5595 (2–3)
- Substantive study in the movement sciences including offerings in physical education in the Department of Health and Behavioral Studies (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 (12)

Doctoral Programs

Specialization in applied physiology or in motor learning and control is required for the doctoral program. 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

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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 4060, Neuromuscular response and adaptation to exercise (2)
- BBS 5068, Brain and behavior I: communication in the nervous system (1–2)
- BBSR 4065, Biological and behavioral basis of sleep (3)
- BBSR 4095, Applied physiology I (3)
- BBSR 4195, Applied physiology laboratory I (3)
- BBSR 5095, Exercise and health (3)
- BBSR 5194, Applied physiology laboratory II (3)

- One additional laboratory course: BBSR 5195 or BBSR 5055 (3)
- BBSR 5596, Topics in applied physiology (3)
- BBS 6070, Neural basis of respiration (3)
- Three courses (9) selected from BBSR 4050, BBSR 4055, BBSR 4060, BBSR 4005, BBSR 5028, BBSR 5055, BBSR, 5057, BBSR 5200, MSTC 4054, MSTC 5052, BBS 4043, HBSS 5010, HBSS 5011, HBSS
- BBSR 5582, Research design in the movement sciences (3)
- Statistics sequence minimally two courses (6 points) from: HUDM 4122, HUDM 5122 and HUDM 5123
- BBSR 5595, Research seminar in applied physiology (typically, students enroll each semester until degree requirements are completed) (3 points each semester)

Doctor of Education (Motor Learning and Control) In the preparation of doctoral students, the goal is to develop those competencies necessary to pursue scholarly and scientific work and to formulate strategies to enhance professional practice.

Research training uses an apprenticeship model. Students work closely with faculty throughout their preparation: initially as apprentices with access to considerable advisement, subsequently as collaborators, then progressing to a position as independent researchers.

Typically, the dissertation research is an extension of one or two prior studies. Often, research leading up to the dissertation is presented at national meetings or is published in professional journals.

In addition to substantive study and research preparation, students are expected to design an individual program representing their research area and professional concerns. Such preparation requires a significant commitment to graduate study. Doctoral students (and Ed.M. students planning to pursue the doctoral degree) are required to be engaged in research at least three days per week (on- or offsite) and be available for advisement at least two mornings or afternoons.

For the doctoral program with specialization in motor learning and control, specific course requirements (or equivalents transferred from prior graduate study) are:

- BBS 5068, Brain and behavior I: communication in the nervous system (1–2 points)
- BBS 4060, Neuromuscular response and adaptation to exercise (2 points)
- BBSR 4060, Motor learning (2–3 points)
- BBSR 4050, Analysis of human movement (3 points)
- BBSR 4150, Motor learning laboratory (2 points)
- BBSR 4151, Laboratory methods in biomechanics (3 points)
- BBSR 5860, Movement sciences 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 points)
- Four courses (12 points) selected from: BBSQ 4047, BBSR 4055, BBSR 4070, MSTC 5000, BBSR 5028, BBSR 5050, BBSR 5055, BBSR 5057, BBSR 5251.
- Three topical seminars (9 points) selected from: BBSR 5596, BBSR 6263, BBSR 6564, BBSR 6565, BBSR 6571

- Statistics sequence minimum (9 points): HUDM 4122, HUDM 5122 and HUDM 5123
- BBSR 5582, Research design in the movement sciences (3 points)
- BBSR 5151, Analysis of biomechanical signals or an approved course in computer programming (3 points)
- BBSR 5504, Research training in motor learning and control (2–3 points each semester, continuous enrollment required until completion of degree requirements, typically 18 points)
- Individual program and electives (22 points)

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, conference coordinators or through appointment as instructors in basic courses.

Courses:

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. 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. Co-requisite: BBSR 4861, Section 1.

BBSR 4070. Introduction to the psychosocial study of human movement (2–3)

Dr. Muzii. A general overview of knowledge and theory pertaining to the psychosocial dynamics of behavior in sports and dance.

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 5028. Motor development (2–3)

Professor Gentile. Review and analysis of theoretical models and experimental research related to development and performance of motor skills throughout the life span.

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.

BBSR 5098. Biochemistry of exercise (3)

Professor DeMeersman. Enzymatic, hormonal, and metabolic responses to exercise. Interactions of exercise and nutrition. Applica-

tion to exercise performance and health concerns such as carbohydrate metabolism, diabetes, cardiovascular disease, lipoprotein profile, pregnancy, body composition, and osteoporosis.

Laboratory Courses

BBSR 4151. Laboratory methods in biomechanics (3)

Dr. Kaminski. Permission required. Enrollment limited. Prerequisite: BBSR 4050. Students develop technical skills in the application of biomechanics to the study of movement behavior including video-based data collection and computer-based kinematic analysis. Students design and conduct a pilot research study using biomechanical analysis of a functional movement. Special fee: \$75.

BBSR 4161. Motor learning laboratory (1–2)

Faculty. An introduction to qualitative and quantitative analysis of movement and action during acquisition of functional skills.

BBSR 4195. Applied physiology laboratory I (3)

Professor DeMeersman and Lab Assistant. Co- or 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 and Lab Assistant. 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, computerd data plethysmography, tonometry, acquisition and post-acquisition analyses. Lab fee: \$100.

Seminars and Conferences

BBSR 4865. Tutorials in motor learning and control (1–3 or noncredit)

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. Movement sciences conference (1 or noncredit)
Faculty. Topics and speakers are announced in a separate brochure which may be obtained from the department office.

BBSR 6562. Review and analysis of clinical literature (3)

Faculty. Review and analysis of literature in rehabilitation (physical therapy, occupational therapy) and special education, with reference to theory and research in the neurosciences and motor control.

BBSR 6563. Movement sciences conference seminar (2) Faculty. Offered in conjunction with BBSR 5864. 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

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processes underlying skilled performance. Re-enrollment is permitted as topics vary.

BBSR 6571. Research seminar in the psychosocial study 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. Co-requisite: 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 or more) Master's degree students undertake research and independent study under the direction of a faculty member.

BBSR 5504. Research training in motor learning and control (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 perceptual-motor processes. Several learning experiences are offered each semester, involving lectures, laboratory practica, seminars and individual research advisement

BBSR 5505. Tutorial in research conceptualization (2–3) Faculty. Formulation and design of field-based studies and library research projects. Intended for master's (M.A. and Ed.M.) students.

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) Section I: Professor DeMeersman Section II: 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: to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D. degree.

Neurosciences and Education

(Code: TKN) Program Coordinator: Professors Peter Gordon

Degree Offered: Master of Education (Ed.M.)

Special Application
Requirements/Information:
Applications are considered for the fall term only. An interview is recommended.

Students who enter the program with a master's degree may apply up to 30 points of acceptable graduate credit toward the Ed.M. Enrollment may be on a full- or part-time basis. Students may enter the program with only a bachelor's degree but must combine study of the neurosciences with earning an M.A. /M.S. in an applied area such as Speech-Language Pathology, Learning, Disabilities or Reading Specialist. The M.A. /M.S. provides a sequence of supervised practica and opportunities to acquire professional skills and experience.

Program Description:

This is the first and only graduate program focused on the educational and clinical implications of recent advances in understanding brain-behavior relationships. The 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 cognition and behavior and the problems encountered in schools and clinics.

The program leads to an advanced master's degree and is intended primarily for qualified professionals with experience in such fields as speech-language pathology, school psychology, occupational therapy, physical therapy, learning disabilities, and reading. For most graduates, the degree is designed to supplement their professional training; however, some go on to further graduate study.

Degree Requirements:

The program of study in neurosciences 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 make use of neuropsychological assessment findings for instruction and learning.

Professional Studies

All students are expected to develop or enhance their competencies in and understanding of: a) the psychological processes underlying development and learning, b) the nature of psychoeducational assessment, c) the social and philosophical foundations of education, and d) the theory and practice within a particular field of education or clinical specialization. Thus, all students must offer the minimum preparation and point distribution outlined below within the four areas. Prior study at the graduate level may be applied to meet these requirements if judged to be acceptable.

Students who are not qualified through prior study at the undergraduate or graduate level to meet the requirements for registration, certification or licensure in an area of educational or clinical practice must select *one* of the following five areas for professional specialization within this program:

- a) Educational Psychology-Reading,
- b) Elementary Education,
- c) Special Education,
- d) Motor Learning, or
- e) Speech-Language Pathology

In effect, students fulfill the master's level requirements in one of these four areas, and thus qualify for the M.A./M.S. degree during the 60-point program of study for the Ed.M.

For other students who are professionally qualified before entry to this program, there may be requirements in addition to those outlined below.

Psychological processes underlying development, learning and cognition

One course in each of the areas below is required.

Developmental Psychology:

- HUDK 5024, Early language development (2–3)
- HUDK 4024, Developmental psychology: Adulthood and lifespan (2–3)
- HUDK 5219, Adulthood (3)
- HUDK 5023, Cognitive development (2–3)
- HUDK 4020, Theories of human development (3)

Learning and Cognition:

- HUDK 5023, Cognitive development (if not applied toward Developmental requirements)
- HBSK 5097, Psychology of instruction (3)

Psychological Evaluation and Assessment

The two courses (or their equivalents) indicated below are required.

- HUDM 4050, Introduction to measurement (2–3)
- HBSK 5320, Individual psychological testing (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 Neurosciences. With consultation and approval of the advisor, three to four courses are required unless equivalent preparation can be demonstrated.

- HBSK 5070, Neural bases of language, and cognitive development, Section 1 (3) Section 2 (3)
- BBS 4043, The human nervous system (3)
- BBS 4032. Neuroscience of human speech and language (2)
- BBS 5069, Brain and behavior I: Communication in the nervous system (2)
- BBS 5069, Brain and behavior II: Perception, emotion, memory and cognition (1–2)
- BBSQ 4040, Speech and language disorders (3)
- HBSK 5072, Developmental Neuropsychology (3)

Educational and Clinical Applications of the Neurosciences

All students are expected to offer minimally 24 points of study in Neuroscience and Education course work. At least three courses (9 points) must be selected for the Core Courses. The Integrative Seminar (minimum of 3 points) is required during work on the Ed.M. paper. The four additional courses (12 points) necessary to fulfill the point requirement may be selected for the remaining Advanced Course, Field Work/Case Studies, Workshops/Conferences, or Advanced Topical Seminars.

Advanced Courses

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

- HBSK 5338. Neuropsychology assessment in education and clinical practice (3)
- HBSK 5033. Human clinical neuropsychology (3)

- HBSK 5139. Fundamentals of psychopharmacology (3)
- HBSK 5371. Educational neuropsychology (3)

Integrative Seminar

The Seminar HBSK 5575 is required of all students and is taken in conjunction with preparation of the Ed.M. project. It may be taken for two semesters (fall and spring of one academic year), beginning with the second year of the student's full-time equivalent enrollment in the program (15 points). A total of at least 3 points must be accrued in this year.

The Ed.M. project entails a committee of one advisor in the Neuroscience program and at least one other appropriate faculty member. It culminates in a paper of publishable form and quality which is submitted for permanent record at the Teachers College Library, and in an oral presentation of the work to the students and faculty of the Neuroscience and Education program.

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)

Advanced Topical Seminars

- BBSN 6575, Seminar in neuroscience and education (3)
- BBSQ 6510, Seminar: Neuropathologies of speech (3)
- HBSR 6561, Seminar in neuromotor processes (2–3)

Summary of Point Distribution (Ed.M.)

Professional studies (27–32 points)

- Psychological processes (6)
- Psychological evaluation and assessment (6)
- Educational or clinical specialization (15–18)

Neurobiological bases or behavior and educational applications 18–30 points

- Core courses in neurosciences (9–12)
- Educational and clinical applications of the neurosciences (18)
- Integrative seminar in neurosciences and education (HBSK 5575) (3 or more)

Electives (3–12 points) Minimum Total (60 points)

Opportunities for student participation in research are available. Preparation of a master's thesis is required for the degree.

Note: Teachers College students enrolled in selected doctoral programs may arrange a focus in the area of Neurosciences and Education. These include Clinical Psychology, Counseling Psychology, Developmental Psychology, Educational Psychology, Motor Learning, Science Education, Special Education, and Speech Sciences.

The Program in Neurosciences and Education offers a Postdoctoral Advanced Study program in Clinical Neuropsychology. Contact Professor Peter Gordon for more information.

Clinical Neuropsychology

(Code: TZK)

Degree Offered:
Certificate of Attendance
See listing in Department of
Health and Behavioral Studies.

Courses:

HBSK 5033 Human clinical neuropsychology (3)
Faculty. Permission required. Prerequisite: HBSK 4075 or equivalent. Cognitive and emotional disorders associated with particular brain functions or locations.

HBSK 5070. Neural bases for language and cognitive development Section 1 (3) Section 2 (3) Professor Kirk. Permission required. Examination of neural mechanisms involved in language, reading, and the acquisition of academic skills. Particular attention to language disorders, variations in cerebral organization, and hemisphere specialization.

HBSK 5072. Developmental neuropsychology (3)

Faculty. Permission required. Prerequisite: HBSK 4075 or HBSK 5070 or HBSK 5068 or equivalent background in basic neurosciences; also recommended: an introductory course in developmental psychology. Focus on neurobiological processes underlying pre- and post-natal development of the central nervous system. Particular attention is devoted to processes related to early perceptual-motor and cognitive development and to educational and clinical problems in development.

HBSK 5139. Fundamentals of psychopharmacology (3)
Faculty. Permission required.
Mechanisms of action and behavioral effects of drugs on the central nervous system. Focus on drugs influencing learning and memory and those used for psychiatric and neurobiological conditions.

HBSK 6383. Neuropsychological assessment of children and adults (3)

Faculty. Permission required. Prerequisites: HBSK 5033 or HBSK 5070; and HBSK 5320. Analysis, administration, and interpretation of special procedures used to assess brain damage/dysfunction in adults and children. Special fee: \$150.

HBSK 5375. Fieldwork in reading and cognitive development from a neuropsychological perspective (4)

Faculty. Permission required. Prerequisite: previous courses in neuropsychological and educational assessment. Interpretation and implications of neuropsychological assessment for effective educational interventions. Materials fee: \$100.

HBSK 5575. Integrative seminar in neurosciences and education (3)

Faculty. Primarily for students in the Neurosciences and Education program during preparation of the final Ed.M. project; others by permission. In-depth examination of the implications for education and clinical practice of defined areas within the neurosciences.

HBSK 5905. Research-independent study in neurosciences and education (1–3)

Faculty. Permission required.

Advanced Study

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

HBSK 9410. Supervised internship, advanced study level (1–6) Professor Kirk. Internship for Advanced Study program students in Neurosciences and Education. Supervised experience with assessment and intervention techniques in the neurosciences as they apply to education and clinical practice.

Physical Education

Program Coordinator: Professor Stephen Silverman

Degrees Offered: Master of Arts (M.A.) Master of Education (Ed.M.) Doctor of Education (Ed.D.) in Movement Sciences and Education

Program Description:

The program in Physical Education has a long and distinguished history. 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.

Physical Education

(Code: TRP)

Degree Offered: Master of Arts (M.A.)

Special Application
Requirements/Information:
The GRE is not required.

Program Description:

The program 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 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.

Degree Requirements:

After consultation with their advisor, students will select a minimum of 18 points in courses. At least six credits 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

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.

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.)

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.

Program Description:

The M.A. program is designed so physical educators can develop greater knowledge about curriculum and teaching. The 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. A

program leading to certification as a director of physical education is available.

The Teach and Study Program, which is for qualified teachers of physical education, assists applicants in finding a physical education teaching position (parttime or full-time) in schools in the Teachers College vicinity.

The 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.

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, and 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) Student teaching in both elementary and secondary schools for a full semester. Includes a required seminar.

BBSR 5040. Curriculum designs in physical education (3) 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

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)
Field projects in program evaluation, curriculum development, analysis of teaching, and the application of teaching strategies.

BBSR 5543. Seminar in physical education (2 or 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) 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) 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 or more) 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)

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 (1–8) Permission required. For advanced students who wish to conduct research under faculty guidance. See HBSR 4900 (General Offerings).

BBSR 7500. Dissertation seminar in movement sciences and education (0–3)

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)

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.

Speech-Language Pathology and Audiology

(Code: TQ) Program Coordinator: Professor John H. Saxman

Speech and Language Pathology

(Code: TQC)

Audiology

(Code: TQE)

Degrees offered:

Speech-Language Pathology Master of Science (M.S.) Doctor of Education (Ed.D.) Doctor of Philosophy (Ph.D.)

Audiology

Master of Education (Ed.M.)* Doctor of Education (Ed.D.)* Doctor of Philosophy (Ph.D.)* *These programs are currently not admitting new students.

Special Application Requirements/Information: Ideally, 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.

The Master of Science degree in Speech and Language Pathology accepts applicants for the Fall semester only, and does not accept applications after the priority deadline.

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

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 5 or 6 pages in length, describing a major clinical problem in need of investigation or clarification in the applicant's area of interest.

Doctor of Philosophy (Ph.D.) If possible, at least one letter of recommendation related to the applicant's research potential by a professional familiar with the applicant's interests and aptitudes. A paper, not more than 5 or 6 pages in length, describing a major research need in the applicant's area of interest. Completion of at least 90 credits 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.

Program Description:

The programs in Speech and Language Pathology and Audiology offer advanced education and training in the processes of individual human communication (speech, hearing, language), disorders of human communication, and remedial procedures for such disorders. Emphases and interests of the program are reflected in the work of the following faculty: Professor O'Malley-psychoacoustics, including frequency selectivity, two-tone suppression, auditory spectral resolution, pitch, and auditory temporal acuity; Professor Saxman-speech and language development and disorder; Professor Sweeting-vocal tract function and dysfunction and life span development of speech processes; Professor Gordonlanguage acquisition, psycholinguistics, cognitive development in infants and children. Professor Patel-augmentitative and augmentative communication, acoustics of speech production, technology-aided human communication.

Programs leading to the M.S., Ed.M., Ed.D., and Ph.D. degrees in Speech and Language Pathology or Audiology (doctoral only) prepare graduates for positions in a variety of professional settings: school systems, community speech and hearing centers, rehabilitation centers, hospital clinics, private practice, state departments of education, health departments, federal agencies, and colleges and universities.

Because of the program's central concern with the processes of individual human communication 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.

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

Degree Requirements:

Master of Science in Speech-Language 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 credits of course work in appropriate specified areas for the ASHA CCC-SP 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 credits 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 students 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
- BBS 5069, 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; HUDK 5091 Applied

psycholinguistics; A&HL 4000 The study of language; A&HL 4003 Approaches to 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 coursework 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 co

The following core courses must be taken at Teachers College or the equivalent course material must have been taken as part of a student's prior coursework and approved by the student's academic advisor:

Speech-Language Pathology

- BBSQ 4040, Speech and language disorders (2)
- BBSQ 5111, Tests and testing procedures (3)
- BBSQ 5112, Articulation disorders (3)
- BBSQ 5113, Voice disorders (3)
- BBSQ 5114, Stuttering: theory and therapy (3)
- BBSQ 5115, Language disorders in children (3)
- BBSQ 5116, Language disorders in adults (3)

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 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 one-time 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 & augmentative systems (2)
- BBSQ 5118, Cleft palate (2–3)
- BBSQ 5119, Alaryngeal speech (1)
- BBSQ 5130, Assessment & intervention for dysphagia (2)
- BBSQ 6111, Neurogenic speech disorders (2–3)
- BBSQ 4047, Early motor behaviors in children: normal and abnormal (3)
- BBSQ 5117, Cerebral palsy and speech habilitation (3)
- BBSQ 6111, Current issues and practices in speech-language pathology (1–3)

Research Methods
Students are required to take
BBSQ 5940, Evaluating
research in speech-language
pathology, or to have previously taken equivalent coursework. This course is offered
during the fall term.

Out-of-Department Courses
Students at Teachers College are required to take 2 courses 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.
Out-of-department courses may be taken pass/fail. Currently, any advisor approved non
BBSQ course meets the "out of department" requirement.

Practicum Requirements

• Therapy practicum. Students enroll in Practicum (BBSQ 5331/2) starting with their first semester at Teachers College and continue in Practicum during each subsequent semester, including at least one summer (BBSQ 5315/6). 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 350 supervised clinical hours within a minimum of 3 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 (Tests and Testing Procedures) and is contingent upon satisfactory completion of academic coursework and therapy Practicum experiences in a variety of disorder areas. Assignment to this Practicum is also determined by and at the discretion of the Clinic Program Coordinator.
- Clinic Lab. Students must enroll in BBSQ 5333 or BBSQ 5334, depending on previous academic background. This is a one-semester course in Laboratory Methods and Instrumentation in Clinical Practice that is taken for 1 point. All students meet on Tuesday mornings for a lecture/presentation. Students are also assigned to small group workshop sessions.
- Hearing Practicum. Students are required to enroll in BBSQ 5343 (Hearing Measurement). This is a one semester, one point Practicum that fulfills the ASHA requirement for clinical hours in Audiology.

Doctor of Education

This degree program leads to a professional doctorate in Speech-Language Pathology and is designed to prepare candidates for professional leadership in clinical, supervisory, and teaching activities. A minimum of 90 points must be completed. There is no language requirement.

Doctor of Philosophy

This program is designed for individuals primarily interested in careers in Speech-Language 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," and request from the program office statements on Ed.D. and Ph.D. programs.

Continuing Professional Education Each year, the Speech and 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 and 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 livecase presentations by the instructors and by direct experiences with clients within the Edward D. Mysak Speech-Language and Hearing Center.

Practical training at the master's and doctoral levels includes lecture/demonstrations, small-group instruction, and direct experience with clients. Students engaged in practica are supervised individually and in groups by the faculty and staff of the program. Unusual opportunities for learning and inquiry with reference to advanced clinical, supervisory, teaching, and research activities are provided within the large, well equipped, and active Edward D. Mysak Speech-Language 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 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-Language 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, laboratories maintained by the Department's programs in applied physiology and motor learning and control. 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 Shield Institute, the Parkside School, the League Center, and others are available through the department. For information and applications, contact the Office of Student Aid.

The program for preparing teachers of the speech and hearing handicapped 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 two points only.)

Professor O'Malley. This course covers the anatomy and physiology of the auditory system, pure tone and speech audiometry, types and effects of hearing loss, amplification, and immitance audiometry.

BBSQ 4045. Communication problems among the aging (2–3) Faculty. Survey of disordered communication processes in the aged, its assessment and its management in a variety of settings. Designed for non-majors, especially for those in gerontology, psychology, social work, nursing, health education, health administration, physical and occupational therapy, and dental hygiene.

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 communication (AAC). A thorough examination of the assessment and therapeutic processes will be presented. Emphasis will be placed upon individuals exhibiting severe communication disorders secondary to congenital/acquired cognitive and motor impairments. Low and high tech AAC systems will be discussed and demonstrated. Important to speech therapists, special educators, psychologists, occupational and physical therapists, school administrators and other health professionals.

BBSQ 4047. Early motor behaviors in children: normal and abnormal (3)

Dr. Sheppard. Study of normal and abnormal development of sensorymotor speech processes and related oral motor behaviors; etiology, diagnosis, and management of prespeech and eating pathologies in infants and severely handicapped individuals.

BBSQ 5041. School speech-language-hearing program (2)
Faculty. Prerequisite: BBSQ 4040 or equivalent. Analyzes impact of federal and state laws on service delivery in schools. Develops skills to meet the needs of communication-disordered student with the full range of disabilities, including working with other professionals to assist children in accessing the general curriculum.

BBSQ 5042. Geriatric communicology (2)

Faculty. Biomedical, psychosocial, and environmental factors as they relate to speech and hearing in the aged. Adaptations and innovations in procedures for assessment and management of geriatric communication problems. Programs for the delivery of services in institutions and the community.

Basic Speech and Hearing Science

BBSQ 4030. Speech Science (3) Professor Patel. 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)

Professor Patel. 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 (Speech-Language Pathology)

BBSQ 5105. Assessment of child language (2–3)

Faculty. This course will cover procedures for analyzing and probing a child's language for the purposes of identifying language impairment and determining individualized intervention goals. Areas of language needed to be covered include morphology, syntax, semantics, pragmatics, and narrative for the age span from toddlers to preadolescence.

BBSQ 5110. Pathologies of speech systems (3)

Faculty. Prerequisite: an introductory course in speech pathology. Discussion of major speech systems including the integrator, facilitator, receptor, effector, transmitter, and sensor systems. Identification of anomalies and diseases that affect the systems and accompanying speech, hearing, and language symptoms.

BBSQ 5111. Assessment and evaluation (3)

Ms. Crowley. Permission required. Required of speech pathology majors. Prerequisite: an introductory course in speech pathology. Studies use of published tests, technology, and alternative and curriculum-based strategies in assessment. Focuses on impact of bilingualism and socio-linguistics 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) Professor Sweeting. 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)

Professor Gordon, Ms. Crowley. Prerequisite: an introductory course in speech pathology. Language disorders of native English speakers and children from culturally and linguistically diverse homes. Course covers birth through late adolescence and includes impact of language disorders on language acquisition, literacy, and uses of technology.

BBSQ 5116. Language disorders in adults (3)

Dr. Goldfein. Prerequisite: an introductory course in speech pathology. Study of aphasia: etiology, diagnosis, classification, and remedial procedures.

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

Ms. Klatsky. 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 bilingual education, sociolinguistics, psycholinguistics, and multicultural perspectives in education of communication disordered children. Considers appropriate assessment and treatment to ensure optimal academic success for English language learners with communication disorders.

BBSQ 5130. Assessment and intervention in dysphagia (2) Dr. Sheppard. Study of eating and swallowing disorders in children and adults. Assessment and management strategies for eating and swallowing disorders.

Applied Hearing Science Courses (Audiology)

BBSQ 5125. Clinical approaches to aural habilitation of children

Faculty. Prerequisite: BBSQ 4042 or equivalent. Clinical procedures available to audiologists, speech pathologists and deaf educators for implementing speech-reading, auditory training, speech-language

therapy for the hard-of-hearing child. Use of amplification and counseling approaches.

BBSQ 5126. Clinical approaches to aural rehabilitation of adults (3)

Faculty. Prerequisite: BBSQ 4042 or equivalent. Recent developments in speech-reading, auditory training, and speech conservation. The audiologic problems of the geriatric population. Principles of therapy and clinical techniques emphasized.

BBSQ 5129. Audiological concepts and principles (1)
Professor O'Malley. Prerequisite:
BBSQ 4042 Audiology or equivalent. This course covers pathologies of the auditory system; electrophysiological measures, otoacoustic emissions, tests of central auditory function.

Practica

BBSQ 5210-BBSQ 5212.

Practicum in school speechlanguage pathology (3)

Professor Sweeting. 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 per section) Professor Sweeting. Sections: (1) TBA. (2) TBA. (3) TBA. (4) Required of speech pathology majors. Prerequisites: BBSQ 5110 and BBSQ 5111. Methods of assessing native English speakers and culturally and linguistically diverse clients across the full range of disabilities and across the lifespan. Analysis of language skills related to academic achievement. Uses of technology in assessment. Special fee: \$150.

BBSQ 5331-BBSQ 5339. Therapy Practicum

Faculty. Assessment and intervention planning and implementation for clients across the full range of disabilities and across the lifespan. Covers the needs of native English speakers and English language learners in hospitals and school settings. College-supervised practica.

BBSQ 5331-BBSQ 5332. Regular clinic (3)

Professor Sweeting (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. 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

Faculty. Instruction and practice in acoustic and physiologic measures related to voice, articulation, and fluency disorders.

Majors must enroll for one Autumn and one Spring term.

Special fee: \$150.

BBSQ 5335. Infant evaluation clinic (0)

Dr. Sheppard. Observation and participation in the evaluation of pre-speech and feeding behaviors in at-risk infants and in the development of individualized management programs. Special fee: \$150.

BBSQ 5336. Stuttering clinic

Dr. Wexler. Observation and participation in group therapy for adult stutterers. Special fee: \$150.

BBSQ 5337. Aphasia clinic (0) Faculty. Observation and participation in group therapy for adult aphasics. Special fee: \$150.

BBSQ 5338. Voice clinic (0) Faculty. Observation and participation in group therapy for adults with voice problems. Special fee: \$150.

BBSQ 5339. Computer applications in clinical practice (0) Faculty. Understanding, evaluating, and implementing microcomputer facilities in speech and hearing practice. Special fee: \$150.

BBSQ 5340-BBSQ 5343. Methods and practice in audiology Faculty. Permission required. Preor co-requisite: BBSQ 5120. May be repeated for credit.

BBSQ 5342. Auditory rehabilitation clinic (0)

Faculty. Observation and participation in individual and group therapy for hearing impaired individuals. Special fee: \$150.

BBSQ 5343. Hearing measurement (1)

Faculty. Practice in hearing screening, audiological evaluation, hearing aid fittings and trouble-shooting malfunctioning hearing aids. For speech and language pathology majors. Prerequisite: BBSQ 4042. Special fee: \$150.

BBSQ 6351-BBSQ 6355.

Advanced practice (2)
Faculty. Advanced practice in speech-language pathology and audiology required. Doctoral students are required to register in four sections during their period of candidacy. Observation of faculty during therapy, diagnosis, supervisory, teaching, or research activities and participation in such activities.

BBSQ 6351. Clinical (2) BBSQ 6352. Supervision (2) BBSQ 6353. Teaching (2) BBSQ 6354. Laboratory (2) BBSQ 6355. Administration

Research Courses and Seminars

BBSQ 5940. Evaluating research in speech-language pathology and audiology (3)
Professor O'Malley. Required of all Master's and first-year doctoral students. Evaluation of research methods.

BBSQ 5941. Research needs and methods in speech-language pathology and audiology (3) Professor Saxman. Permission required. Prerequisite: BBSQ 5940. Required of first-year doctoral students. Development of rationales for doctoral dissertations and projects.

BBSQ 6511. Seminar in supervision in speech-language pathology and audiology (2)
Faculty. Permission required.
Study of supervisory models in speech-language pathology and audiology and related areas.

BBSQ 6512. Seminar in the practice of supervision in speech-language pathology and audiology (3)

Faculty. Permission required. Prerequisite: BBSQ 6511. Continued study of supervisory processes and opportunity for supervisory experiences.

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 6520. Seminars in basic and applied hearing science (3) Professor O'Malley. Permission required. For doctoral candidates and advanced master's degree students in audiology. Doctoral candidates are required to enroll in at least three seminars. Intensive

study and analysis of current issues

BBSQ 6517. Neuropathology

of speech (3)

on particular topics.

BBSQ 6940-BBSQ 6941. Supervised research in speech-language pathology and audiology (3 per section)

Sections: (1) Professor Saxman. (2) Professor O'Malley. (3) Professor P. Gordon (4) Professor Patel. 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.

nar 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 Autumn term immediately fol-

lowing completion of BBSQ 6941.

BBSQ 7500. Dissertation semi-

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.

Continuing Education

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.

BBSQ 6112. Neurospeech therapy for the cerebral palsied (1–3)

Faculty. Required. Application of developmental neurophysiology to cerebral palsy speech habilitation. Discussion, demonstration, and practice in neurophysiological evaluation of and neurospeech therapy for cerebral palsied children.

BBSQ 6120. Current issues and practices in audiology (1–3) Faculty. Topics will vary with respect to current issues and practices in audiology.

BBSQ 6811. Neuromuscular facilitation approaches to assessment and treatment of oral motor dysfunction (Noncredit or 1–3)
Dr. Sheppard. Application of neuromuscular facilitation approaches to the various eating, pre-speech, and motor speech disorders caused by oral motor dysfunction in infants and the severely, develop-

mentally disabled.

BBSQ 6812. Symposium on care of the professional voice (1) Faculty. Course taken in association with the annual symposium on the care of the professional voice sponsored by The Voice Foundation. The purpose of the symposium is to present the latest information on research findings and on teaching and clinical activities pertinent to the care of the professional singing and speaking voice.

Chair: Barry A. Farber Location: 328 Horace Mann Telephone Number: 212-678-3257 Fax: 212-678-3275

Programs:

Psychological Counseling Counseling Psychology Clinical Psychology Psychology in Education

Faculty:

Professors:

Judith Berman Brandenburg
(Counseling)
Robert T. Carter (Counseling)
Barry A. Farber (Clinical)
Leah Blumburg Lapidus
(Clinical)
Elizabeth Midlarsky (Clinical)
Rosalea A. Schonbar
(Clinical)—Emeritus
Derald Wing Sue (Counseling)

Associate Professors:

George Bonanno (Clinical)

Assistant Professors:

George Bonanno (Clinical) George V. Gushue (Counseling) Lisa Miller (Clinical) Christine Yeh (Counseling)

Adjunct Professors:

James Fosshage (Clinical) Jerome W. Kosseff (Clinical) Judith Kuriansky (Clinical) Stephen Reisner (Clinical) Arnold W. Wolf (Counseling)

Visiting Adjunct Professors:

Jesse D. Geller (Clinical)

Adjunct Associate Professors:

Xavier Amador (Clinical)
Jill Backfield (Clinical)
Ghislaine Boulanger (Clinical)
Nurit N. Israeli (Counseling)
Nanette A. Kramer
(Counseling)
Aracelia Pearson-Brok
(Clinical)
Joseph Wagenseller (Clinical)

Adjunct Assistant Professors:

Tamara Buckley (Counseling) Clarissa Bullitt (Clinical) Marc Gameroff (Clinical) Julie Goldberg (Counseling) Christiane Humke (Clinical) Scott Kellogg (Clinical) Lisa Kentgen (Clinical) Michael J. Koski (Counseling) Samuel E. Menahem (Clinical) Robin Nemeroff (Clinical) Laura Nisco (Clinical) Elizabeth Owen (Clinical) Billie Pivnick (Clinical) Dinelia Rosa (Clinical/ Counseling) Andrea Safirstein (Counseling) Roni Beth Tower (Clinical) Helena Verdeli (Clinical) Leo Wilton (Counseling) David Yourman (Clinical)

For information about faculty and their scholarly and research interests, please refer to the "Faculty" section of the Catalog.

Departmental Mission:

This department prepares students to investigate and address the psychological needs of individuals, families, groups, organizations/institutions, and communities. Counseling psychology focuses on normal and optimal development across the lifespan, with particular attention to expanding knowledge and skills in occupational choice and transitions, and multicultural and group counseling.

Clinical Psychology primarily uses a broad-based psychodynamic perspective to study and treat a variety of psychological and psychoeducational problems. In addition to sharing an interest and appreciation for the critical role of culture in development and adaptation, both programs highly value the teaching of clinical and research skills.

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.

Counseling Psychology

Program Coordinator: Professor Robert T. Carter Director of Training: Professor Robert T. Carter

Degrees Offered:

Master of Education (Ed.M.)
(Code: TJE) M.A. en passant
Doctor of Education (Ed.D.)—
currently not accepting
applications

Doctor of Philosophy (Ph.D.) (Code: TJV)

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 program's training objectives.

Applications are considered once a year for the doctoral program and throughout the year for the master's program. Master's applications received after the priority deadline for the fall semester will be considered until April 15 on a space-available basis.

Master of Education
At least one of the two required letters should be an academic reference. The GREs are not required for the Ed.M.

Doctoral Program

Doctoral applicants must submit all credentials along with their scores on the Graduate Record Examination General (Aptitude) Test by December 15. 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, usually by April. All admissions materials must be received by the December 15 deadline.

While 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.

Program Descriptions:

The Program in Counseling Psychology is dedicated to the preparation of psychological counselors (master's students) and counseling psychologists (doctoral students) 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.

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
- intervene in appropriate arenas through their commitment to education, evaluation, research, and program development
- 3) focus on the development of individuals and groups, their educations and careers, assets and strengths, the importance of person-environment interactions, psychoeducation and preventive needs, as well as their pathologies
- 4) integrate theory, practice, and research
- 5) develop identities as ethical counselors who are socialized into the profession and contribute to the discipline and to society.

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. As a result of more in-depth training at the doctoral level, the roles of counseling psychologists include a capacity 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, revelant 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.

Regardless of their eventual work settings, students in the program are expected, by the end of their training, to have the following in common:

- 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.

Experience has shown that the program is not appropriate for students who seek to become psychotherapists. Applicants who are so motivated are advised to seek admission to a program in clinical psychology.

Master of Education

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 30 points must be taken at Teachers College. The Ed.M. can lead to the doctorate at Teachers College and elsewhere, but usually with some loss of time and credits because of differences in emphasis between master's and doctoral programs.

School counseling is one of several areas of specialization within the Ed.M. in Psychological Counseling whose graduates are eligible for certification. It is a specialty that allows students to develop appropriate skills to deliver services unique 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. See specific course requirements in the "Degree Requirements" section below, as well as in the School Counseling Specialization statement available from the Counseling Psychology Program.

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.

Similarly, students can become certified as rehabilitation counselors by completing a series of specified courses, 3 to 4 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). See details in the "Degree Requirements" section below.

In addition, students who complete the Ed.M. are eligible to apply in states that offer master's -level licensure.

A terminal M.A. degree is not offered. However, students who have completed 32 credits of appropriate work and passed the master's level comprehensive examination at Teachers College may apply for the award of the en passant M.A. during their third full-time (or part-time equivalent) semester of study. To satisfy residence requirements, 45 points out of the 60 must be completed at Teachers College if both the M.A. and Ed.M. are sought. Those 45 credits must include all courses required for the M.A. Students should be aware that transfer credits cannot be used toward the MA en passant.

Required courses 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. Full-time students generally complete the program in about two

years. The length of completion for part-time students varies with the number of points for which they enroll each semester.

Doctor of Philosophy

The program of study that follows is described in terms of full-time study. Some of the courses may be taken on a parttime basis. At least one full year of full-time study after the first 30 applicable credits is required unless the student can present persuasive evidence that his/her living and working circumstances have not prevented and will not prevent him/her from taking full advantage of the College's resources. Certain essential subjects and practica are offered only in the morning and early afternoon hours.

The doctorate is granted after successful completion of a minimum of 90 points of planned, sequential study beyond the bachelor's degree, of which at least 60 points must be taken at Teachers College. The doctoral program is approved 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.

- Students are required to take 6 semesters of Advanced Professional Issues. Registration for these 6 semesters should occur in the first three years of study.
- Students must take 5 semesters of practicum, beginning in the spring semester of the first year. Students are required to attend a weekly 2 hour seminar, as well as meet with the individual supervisor and with each client.

- Students must take 5 semesters of research-focused courses, beginning with Review of Research in Counseling in the spring of the first year, followed by one year (two semesters) of Research Practicum with a faculty member, followed by a two semester Dissertation Seminar. These courses are in addition to the two semesters of statistics required of each student, and a semester of Research Methods in Social Psychology.
- Students must complete at least 6 general psychology core requirements in the areas of cognitive and affective aspects of behavior, human development, social aspects of behavior, biological aspects of behavior, history and systems of psychology, and measurement.
- Students must also complete a course in ethics, to be taken in the first year.
- Students must also take Group Counseling, Racism and Racial Identity in Psychology and Education, or Perspectives on Cross-cultural Counseling in Psychology, Racial Cultural Counseling Laboratory, and one year of Psychological Testing.

Please note that upon admission to the Ph.D. students will receive a *Handbook for the Ph.D.* in Counseling Psychology.

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. In consultation with their advisors, students will select the courses and other learning experiences which best utilize what they have already mastered and which will add to their mastery of areas of competence considered necessary and desirable.

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; 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, he/she is expected to be prepared for the probable future of counseling psychology in the areas of expertness represented by this 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.

Degree Requirements:

Master of Education

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.

The core courses are:

- CCPJ 4064 Theories of Counseling (3)
- CCPJ 5062 Career counseling and development (2-3)
- CCPJ 4560 Professional issues (2)
- CCPJ 4873 Winter Roundtable in Cross-cultural psychology and education (1)
- CCPJ 5371 Counseling skills I (3)
- CCPJ 5372 Counseling skills II (3)
- CCPJ 5025 Group counseling (3)
- CCPJ 5020 Racism and racial identity in psychology and education (3)
- CCPJ 5164 Cross-cultural counseling and psychology (2-3)
- CCPJ 5165 Racial/cultural counseling laboratory (4)

The courses for the broad and basic areas may be met by one of the following:

- HUDK 4022 Developmental psychology: childhood (2-3)
- HUDK 4023 Developmental psychology: adolescence (2-3)
- HUDK 4024 Developmental psychology: adulthood and the life span. (2-3)
- HUDK 5029 Personality development and socialization across the lifespan (2-3)

The Clinical Psychology requirement may be met by one of the following four courses:

- CCPX 4030 Psychology of adjustment (3)
- CCPX 4035 Personality and behavior change (3)
- CCPX 5032 Personality and psychopathology (3)
- CCPX 5034 Developmental psychopathology (3)

The Research requirements may be met by taking two of the following courses:

- HUDM 4122 Probability and statistical inference (3) and
- HUDM 5059 Psychological measurement (3), and
- HUDM 5122 Applied regression analysis (3), or

 ORLJ 4009 Understanding behavioral research (3) and

Students should register for the following courses to meet Fieldwork and Practicum requirements:

- CCPJ 5260 Fieldwork in counseling and rehabilitation (2-4)
- CCPJ 5263 Supervised fieldwork in elementary school counseling (2-4)
- CCPJ 5265 Supervised fieldwork in secondary school counseling (2-4)
- CCPJ 5360 Practicum in career and personal counseling (4)

Students must have completed all prerequisites for the Fieldwork and Practicum before they will be allowed to register for these courses. Please see prerequisites which are listed with the course descriptions. Students must apply for CCPJ 5360 between April 15 and June 1 of the Academic Year prior to their planned enrollment in the practicum. Applications are available from the program secretary. In addition, CCPX 5630 (Case Conference), offered for zero credit, must be taken concurrently with CCPJ 5360.

Students planning to complete the requirements for N.Y.S. certification in School Counseling must take either CCPJ 4160, School counseling for children and youth *or* ITSL 5023, Counseling techniques for the bilingual-bicultural children and their families, and do their fieldwork (CCPJ 5263 *or* CCPJ 5265) in a school setting. Colleges are not a recognized school setting for certification purposes.

Students interested in becoming Certified Rehabilitation Counselors must take CCPJ 4065, Career development of women; CCPJ 4062, Medical aspects of disabilities and rehabilitation *or* CCPJ 5063, Psychological aspects of disabilities and rehabilities and rehabilities and rehabilities and rehabilities and rehabilities.

bilitation; and CCPJ 4061, Rehabilitation counseling: principles and practices. Students' fieldwork (CCPJ 5260) must be done in a rehabilitation setting under the supervision of the Certified Rehabilitation Counselor (CRC).

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.

Doctoral Program

Please note that satisfactory performance in required courses is defined as an overall grade point average of B+. No course in which the grade earned is lower than B can be considered.

General Psychology requirements:

- HUDK 4029 Human cognition and learning
- HUDK 5029 Personality development and socialization across the life span
- ORLJ 5540 Pro-seminar in social and organizational psychology
- CCPJ 4075 Brain and behavior
- CCPX 6020 History and systems of psychology
- HUDM 5059 Psychological measurement

Professional Development requirements:

- CCPJ 6569 Scientific and professional ethics
- CCPJ 6560 Advanced professional issues (first three years)

Research: There are two areas of requirements: Research Methodology and Techniques of Data Analysis.

Research Methodology requirements:

- CCPJ 5560 Review of research in counseling psychology
- CCPJ 6572-79 (Year Course), Research practicum in counseling psychology
- CCPJ 5040 Research methods in social psychology
- CCPJ 7502 (Year Course), Dissertation seminar
- CCPJ 8900 Dissertation advisement

Techniques of Data Analysis requirements:

- HUDM 4122 Probability and statistical inference
- HUDM 5122 Applied regression analysis

Practice:

Our practice sequence includes courses associated with individual differences, human functioning, dysfunctional behavior or psychopathology, theories and methods of assessment, diagnosis and effective interventions. The following courses are required if not taken in a master's degree:

- CCPJ 4064 Theories of counseling
- CCPJ 5371 Counseling skills I
- CCPJ 5372 Counseling skills II
- CCPJ 5062 Career counseling and development
- CCPJ 5360 Practicum in career and personal counseling
- CCPJ 5025 Group counseling

The following courses are required of all doctoral students:

- CCPX 5032 Personality and psychopathology or
- CCPX 5037 Dynamic psychotherapies or
- CCPX 5038 Cognitive behavioral, and interpersonal therapies
- CCPJ 5060-61 (Year Course), Assessment in counseling psychology (individual psychological testing)
- CCPJ 5165 Racial-cultural counseling laboratory

- CCPJ 6330 Basic practicum in individual counseling and psychotherapy
- CCPJ 6350 Externship in counseling psychology
- CCPJ 6360Z (Year Course), Practice in psychological counseling
- CCPJ 5364Z Advanced practicum in cross-cultural counseling and psychotherapy (year course)
- CCPJ 6460 (Year Course), Internship (completed after the student has achieved an approved dissertation)

Practice Electives: Elective possibilities are:

- CCPJ 6363 Advanced group practicum
- CCPJ 6368 Advanced supervision and training
- CCPJ 5368 Supervision and teaching of counseling
- CCPJ 6362 Group practicum

Doctoral Certification

Counseling psychology students do not become official candidates for the degree of Doctor of Philosophy until they have an (1) interdepartmental and college wide examination on research methods and design, (2) submitted a scholarly review of research on a psychological topic of particular interest to them, and (3)passed 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.

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).

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. Exam questions will assess the student's command of: (1) theoretical concepts; (2) core psychology course work; (3) clinical interventions; (4) assessment in career work and personal/social counseling; and (5) professional issues such as ethics, professional trends, and developments in counseling psychology. Cultural issues will be infused in the content questions on the exam.

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.

Students must have an approved dissertation proposal before they can apply for an internship. Students must petition the faculty if they wish to apply for internship. There are progress evaluations done annually to facilitate students timely completion of the Ph.D. degree. Please see the *Doctoral Student Handbook* for further details.

Courses:

Courses at the 4000-level do not usually require permission of the instructor and are open to nonmajors 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. Rehabilitation counseling: Principles and practices (2–3)

Dr. Wolf. History and legislation, principles, settings, major issues. The counselor's role in the rehabilitation program.

CCPJ 4062. Medical aspects of disabilities and rehabilitation

Faculty. Limiting aspects of the major physical and emotional disabilities. Understanding and using medical knowledge in rehabilitation counseling.

CCPJ 4064. Theories of counseling (3)

Professor Sue. Approaches to counseling; theories and research findings; educational, vocational, and personal counseling; typical problems; illustrative cases.

CCPJ 4065. Career development of women (2–3)

Professor Raskin. 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) Faculty. Principles and practices in the guidance of children and adolescents examined from a multidisciplinary and multicultural perspective with special emphasis on facilitating developmental processes of school, family, and community contexts. The role of the Guidance Counselor in developing preventive and rehabilitative interventions in urban and suburban schools/communities will be considered. Special fee: \$15.

CCPJ 4165. Community agencies and resources (2–3)
Faculty. Community services and programs in family and personal counseling, health and child care, mental health, career counseling, job placement, and service to the aged.

CCPJ 4166. Current issues in gerontology (1)

Dr. Kramer. 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 (2)

Professor Brandenburg. 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.

CCPJ 4873. The Winter Roundtable for cross-cultural psychology and education (1) Professor Carter. 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)

Professor Carter. 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 5060-CCPJ 5061. Assessment in counseling psychology (2-master's, 3-doctoral)
CCPJ 5060. Dr. Kramer. 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. This course is divided into 2 sections, as follows:

Section 1: Open to all students. It is a one semester course which covers theories and concepts of testing, an introduction to DSM IV, understanding and interpreting of test results and test reports, and use of assessment results to develop treatment plans and interventions. Section 2: Open only to doctoral students in Counseling Psychology. In addition to the material covered in section 1, it includes training in the administration, scoring, interpretation and reporting of results of a standard battery of test instruments. Students will meet for weekly small-group supervision as well as for class instruction. This course is offered in the Fall. Special fee: \$150.

CCPJ 5061. Dr. Kramer. 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 (2–3)

Dr. Gushue. General concepts of career development and methods of assessment in career counseling. This course also highlights various issues related to the career development of diverse client populations in light of contemporary socio-political phenomena. Materials fee: \$40.

CCPJ 5063. Psychological and cultural aspects of disability and rehabilitation (2–3)

Dr. Wolf. Personality theory and physical disabilities. Personality and environmental variables in the adjustment and rehabilitation process.

CCPJ 5064. Couples and family therapy: theory and practice (3) Dr. Israeli. 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)
Professor Brandenburg. 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)

Dr. Kramer. 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)

Dr. Kramer. 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. Cross-cultural counseling and psychology (2–3) Professor Yeh. Introduces students to a range of approaches used in psychology and other disciplines for developing therapeutic intervention across racial and cultural 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) Professor Carter. Permission and application required. Prerequisites: CCPJ 4064, CCPJ 5361, CCPJ 5362 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.

CCPJ 5167. Consultation and supervision in counseling (2–3) Faculty. Prerequisites: CCPJ 4064, CCPJ 5361, and CCPJ 5362, or equivalent training and experience. For advanced master's and doctoral students. Introduction to the knowledge and skills of consultation and supervision in the helping professions, emphasizing the work of the counselor in schools and agencies.

Relevant Courses in Other Departments Taught by Counseling Faculty:

HUDK 5122. Psychological factors in later life (3) Faculty.

ITSL 5023. School counseling for the bilingual/bicultural child and family (3) Faculty.

Fieldwork and Internships

CCPJ 5260. Fieldwork in psychological counseling and rehabilitation (2–4)

Faculty (Coordinator). Limited to second-year students. 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 5062, CCPJ 5361 I & II, CCPJ 5025; and either HUDK 4022, 4023, 4024 or HUDK 5029; or approved substitutes. Supervised experience in various types of social agencies, rehabilitation agencies, career counseling centers, business establishments, educational institutions, and facilities serving the

elderly. Normally a minimum of two semesters is required at 2 points per term. Additional points of credit may be added only with the approval of the instructor.

CCPJ 5263. Supervised fieldwork in elementary school counseling (2–4)

Faculty. 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. Limited to second-year students specializing in elementary guidance. Prerequisites: CCPJ 4064, CCPJ 5062, CCPJ 5361, CCPJ 5362; and either HUDK 4022, 4023, 4024 or HUDK 5029 or approved substitutes. Normally, a minimum of two semesters is required at 2 points per term. Additional points of credit may be added only with the approval of the instructor. Special fee: \$20.

CCPJ 5265. Supervised fieldwork in secondary school counseling (2–4)

Faculty. 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. Limited to second-year students specializing in secondary guidance. Prerequisites: CCPJ 4064, CCPJ 5062, CCPJ 5361, CCPJ 5025; 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)

Faculty. (Coordinator) and Faculty. Permission required. Limited to advanced students who have completed the regular fieldwork sequence in their area of concentration. Registration not limited to one semester.

CCPJ 6460z. Internship in counseling psychology (0–6) Professor Carter. Permission required. For doctoral students only. Supervised experience in approved and appropriate agencies, institutions, and establishments.

Practica

CCPJ 5025. Group counseling (3) Faculty. 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 roleplays and in a group counseling experience. Attention to the practice of effective group leadership will also be addressed.

CCPJ 5360. Practicum in career and personal counseling (4) Professor Carter. (Coordinator) and Faculty. Limited enrollment. Required: written application by June 1 for either semester of the next academic year, permission of the instructor, and concurrent registration for CCPX 5630. Prerequisites: CCPJ 4064, CCPJ 5062, CCPJ 5361, CCPJ 5025, HUDK 4022, 4023, 4024 or HUDK 5029 or their equivalents. Limited to second-year students (30 or more points) majoring in counseling. 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 5371. Counseling skills I (3) Autumn: Faculty; Spring: Professor Brandenburg. Permission required. Limited enrollment. Prerequisite: for counseling psychology majors, CCPJ 4064 completed or taken concurrently; CCPJ 4064 recommended but not required of other students. 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 5372. Counseling skills II

Autumn: Faculty; Spring: Faculty. Permission Required. Limited enrollment. Pre-requisite: CCPJ 5371. An advanced laboratory experience for counselors and oth-

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ers in the helping professions. Practice in clarifying, understanding, and responding to personal communications. Advanced exercises and videotapes are used to develop counseling and interviewing skills, and desirable counselor attitudes.

CCPJ 5363. Practicum in educational, career, and personal counseling in school settings (3) Faculty. Permission required. Prerequisite: CCPJ 4064, CCPJ 5062, CCPJ 5361, CCPJ 5025, HUD M5059 and HUDK 4022 or 4023. Students take responsibility for counseling under supervision.

CCPJ 5364z. Advanced practicum in cross-cultural counseling and psychotherapy (4) – each term 2 credits
Faculty. 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 5062, CCPJ 5361 I & II, CCPJ 5362, HUDK 4022 or HUDK 4023 or HUDK 4024.

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 6350. Externship in counseling psychology (0–3)
Faculty. Year-long placement in a field-setting for clinical experience. (Required for Doctoral students)

CCPJ 6360z. Practice in psychological counseling (4 points each for Autumn and Spring)
Faculty. 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 short-term counseling 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) Faculty. Permission required. Students must submit written application by the midterm date of the preceding semester. Limited to advanced students with appropriate backgrounds in group work. Students will practice group counseling skills in selective settings.

CCPJ 6363. Advanced group practicum (1–2)

TBA. Permission required. Prerequisites: CCPJ 5025. 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.

Seminars

CCPJ 5560. Review of research in counseling psychology (3) Professor Yeh. Required of and limited to doctoral candidates in counseling psychology. Exploration of theoretical and methodological approaches in counseling psychology.

CCPJ 5563. Special topics and issues in counseling psychology (1–3)

Faculty. New and emerging developments, practices, and concerns in the field are examined and evaluated. Topics are announced in the preliminary and final course schedules distributed each semester. Registration not limited to one term.

CCPJ 6560. Advanced professional issues (1 Autumn, 0 Spring) Faculty. Students will familiarize themselves with a range of professional issues that effect their learning and development as Counseling Psychologists as well as having the opportunity to explore topics not currently available in the cur-

riculum. Limited to doctoral students in psychology.

CCPJ 6569. Professional ethics and standards in psychology (3) Professor Brandenburg. 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 (2–3) Professor Sue

CCPJ 6573. Cross cultural

research (2-3) Professor Yeh

CCPJ 6575. Research models and procedures with racial/cultural emphases (2–3) Professor Carter.
CCPJ 6577. Psychological interventions with older persons (2–3) Dr. Kramer.
CCPJ 6578. Sexual harassment, psychology of the undergraduate, gender and leadership (2–3) Professor Brandenburg.
CCPJ 6579. Racial cultural influences in career, cognition, and health (2–3) Profes-

CCPJ 7502. Dissertation seminar (1–3)

sor Gushue.

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 6460z. Internship in counseling psychology (0–6) Professor Carter. Permission required. For doctoral students only. Supervised experience in approved and appropriate agencies, institutions, and establishments.

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 each course)
CCPJ 6902. Advanced research and independent study in counseling psychology (1–3 each course)
CCPJ 8900. Dissertation advisement (0 each course)

Clinical Psychology

(Code: TXC) Program Coordinator and Director of Clinical Training: Professor Barry A. Farber

Degrees Offered:
Doctor of Education (Ed.D.)*
Doctor of Philosophy (Ph.D.)
Master of Science (M.S.)
en passant

*currently not accepting students

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, learning theory, 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 two 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 February. 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 by both faculty and student members of the Committee.

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*.

In the doctoral program students are prepared for professional work in community agencies, hospitals, research centers, colleges and universities, and independent practice. Completing a 100-point doc-

toral 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).

The doctoral program has been continuously accredited by the American Psychological Association since accreditation was initiated in 1948. Most recently (9/01), the program was awarded "full and seven vears"—the maximum term allowed. Notable graduates both before and after 1948 include Virginia Axline, Albert Ellis, Chaim Ginott, Helen Singer Kaplan, M. Powell Lawton, Perry London, Rollo May, and Carl Rogers. Our current training model is that of the Scholar-Practitioner. This model best reflects the traditional strengths of this program (e.g., equal weight placed on scholarship and practice, significant faculty involvement in community and professional activities, and faculty scholarship that includes but is not restricted to empirical research).

Our scholar-practitioner model means that we are dedicated to training clinically proficient students who are also able to expertly analyze, discuss, and generate scholarly materials, whether in the form of empirical research or theoretical exposition. We fully expect our students' work to be constantly informed by traditional and emerging scholarship in the field. Conversely, we expect our students' work to give rise to theoretical and technique oriented questions that can become the basis for scholarly enterprise. Further, 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 which

form the basis and context of clinical practice.

The theoretical orientation of the Program may be broadly described as psychodynamic. Although we offer exposure to other perspectives (e.g., cognitive-behavioral therapy, family therapy), the Program emphasizes instruction in a variety of psychodynamic models, including traditional insight-oriented psychotherapy, ego psychology, interpersonal approaches, short-term therapy, self psychology and object relations. Thus, the primary objective of the program is to train psychodynamically-informed clinical psychologists who are prepared for research and practice with a diverse population in a variety of settings. Increasingly, the Program is emphasizing work in the child-clinical area.

The Program shares an inhouse 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.

Degree Requirements:

The Program requires:

- 1. The completion of 100 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;

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- 3. An original piece of empirical research, which also serves as a qualifying paper, to be completed during the second year of study;
- A passing grade on the certification examination (on Research Methods) during the third year of study;
- A case presentation and accompanying paper during the third year, demonstrating the student's ability to integrate theory, research, and practice; and
- 6. 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: Professional and Ethical Issues in Clinical Psychology; DSM IV; Psychological Measurement; Applied Regression Analysis; Research Methods; Developmental Psychopathology; and Dynamic Approaches to Psychotherapy. Students also take three semesters of psychological testing and a course in clinical interviewing. Many students begin working with faculty members on research during this first year.

Second Year

During their second year, students' didactic courses include: Brain and Behavior; Experimental Design; Emotion, Culture and Health in Clinical Practice; Psychotherapy with Children; History and Systems; Cognitive, Behavioral and Interpersonal Therapies; the Evolution of Freud's Psychological Theories; and Object Relations Theory. 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,
Short-term Dynamic Psychotherapies; Transference and Countertransference; Empirical Bases of Psychotherapy; and Dissertation Seminar. There is also a full year clinical practicum.

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. Students who elect either a special childtrack or neuropsychology-track take additional didactic courses and practica. Elective courses for all students include Shortterm Dynamic Psychotherapy, Forensic Psychology, Advanced Cognitive-Behavioral Therapy, Women and Mental Health, Family Counseling and Therapy, 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. Coordinator: Professor Farber

Financial Aid

Teachers College has three scholarship funds: General, Minority and International Student. The College also arranges with banks a variety of student loans, most of them repayment- and 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

grant-in-aids are also made available for research on topics relevant to homosexuality, including psychological and/or psychosocial aspects of AIDS or AIDS treatment.

The program currently does not have NIMH-funded traineeships to offer. Most doctoral students with significant financial need obtain help in the form of a tuition scholarship that covers approximately 30% of the cost of a year's tuition. Most students also work parttime to cover expenses.

Student and Faculty Research Despite the small size of the faculty, the range of both student and faculty research in recent years has been broad. Representative faculty research can be found elsewhere in this Catalog. Examples of recently completed student dissertations include: "Gender Differences in Object Relations and Defensive Style" (Sponsor: Barry Farber); "Internalized Shame, Representations of the Supervisory Process, and Trainees' Perceptions of Nondisclosure in Psychotherapy Supervision" (Sponsor: Barry Farber); "Patterns of Self Disclosure and Satisfaction in Psychotherapy and in Marriage" (Sponsor: Barry Farber); "Therapists' Modifications of Psychotherapeutic Boundaries" (Sponsor: Barry Farber); "Effects of Psychological Differentiation on Success with Self-Management of Diabetes" (Sponsor: Leah Blumberg Lapidus); "Psychological Differentiation, Object Representation, and Social Support: Factors Influencing Reaction to Community Violence" (Sponsor: Leah Blumberg Lapidus); "Object Representations of Substance Abusers as Predictors of Treatment Success" (Sponsor: Leah Blumberg Lapidus); "Bicultural Involvement, Psychological Differentiation, and Time Perspective as

Mediators of Depression and Anxiety in Native Americans living on and off Reservation" (Sponsor: Leah Blumberg Lapidus); "Predictors of Perceived Self-Efficacy Among White and African-American Psychologically Distressed Older Adults" (Sponsor: Elizabeth Midlarsky); "Racial Differences in the Association between Religiosity and Psychological Distress" (Sponsor: Elizabeth Midlarsky); "Impact of Maternal Depression on the Intergenerational Transmission of Religion" (Sponsor: Lisa Miller).

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 Midlarsky. This course is designed to provide an introduction to multidisciplinary approaches to mental health including clinical psychology, school psychology, pediatric psychology, forensic and health 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)

Dr. Pearson-Brok. Healthy and pathological adjustment throughout the life span: stress, defense mechanisms, and coping.

CCPX 4032. Assessment and treatment of alcohol and chemical dependency (3)

Dr. Kellogg. 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)
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) Dr. Pearson-Brok. 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)

Professor Farber. Survey and analysis of representative psychotherapies in current practice: psychoanalytic, neo-Freudian, Gestalt, Jungian, client-centered, 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 Eastern-oriented models.

CCPX 4120. Psychotherapy through fiction and film (3) Professor Farber. Psychotherapy, the therapist, and psychopathology as reflected in current fiction and film.

CCPX 4121. Psychology and Shakespeare (3)

Ms. Silverbush. Understanding personality, motivation, and psychopathology, including aspects of culture and gender through critical analyses of Shakespeare's plays and characters

CCPX 4125. Women and mental health (3)

Dr. Bullitt. Stressors, manifestations, and treatment of psychopathology in women; theories of Klein, Horney, Thompson, and others.

CCPX 4126. The mother-child matrix: developmental and clinical implications (3)

TBA. The mother-child relationship: Implications for development and influence on clinical theory and practice, focus on theories of parenting, ruptures in the relationship and therapy with mothers and children.

CCPX 4150. Introduction to forensic psychology (3).

Dr. Owen. The practice and application of forensic psychology to medical-legal problems and nomenclature in diagnosis, evaluation, assessment, treatment, and testimony regarding criminal behavior, psychopathology, and civil, family and criminal law.

CCPX 4230. Fieldwork in applied psychology (3) Professor Midlarsky. Supervised practice in field placements.

CCPX 5020. Emotion, culture & 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)

Professor Schonbar and Dr. Bullitt. Limited to doctoral and postdoctoral students in clinical psychology. Orientation to program and field; ethical and professional issues.

CCPX 5032. Personality and psychopathology (3)
Professor Midlarsky. Major clinical disorders of adulthood viewed from clinical and research perspectives; current issues in diagnosis and treatment.

CCPX 5033. The evolution of Freud's psychological theories (3) Dr. Reisner. Intensive examination of selected psychological works of Sigmund Freud from 1892 to 1940, focusing on theoretical innovations, modifications, and elaborations.

CCPX 5034. Developmental 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. Transference and countertransference arising from differences in age, gender, racial, ethnic, and sexual orientation backgrounds (3)

Dr. Pearson-Brok. 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. Spring: 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 Miller. Doctoral candidates in psychology; others by permission. Introduction to theory and technique underlying treatment within the following modalities: Cognitive, Behavioral, Interpersonal, and Short-Term 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 5045. Psychotherapy, religious diversity & spirituality (3)

Professor Miller. No prerequisites. Open to Ph.D., M.A., & M.Div. students in all departments. 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 re-examination of models of psyche and goals of treatment.

CCPX 5048. Advanced cognitive-behavioral therapy (3) Dr. Humke. Permission required. Application of cognitive-behavioral interventions in clinical practice.

CCPX 5060. 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 5102. Research and clinical applications of DSM IV (3) Dr. Tower. Diagnostic, clinical, and research applications of the DSM-IV; ethical, cultural, and gender issues in the diagnostic process.

CCPX 5230. Fieldwork in clinical psychology (1)Autumn, (0) Spring

Supervised practice in field placements. Sections: (1) Adult Externship (Dr. Tower). (2) Child Externship (Professor Miller).

CCPX 5330. Principles and techniques of clinical assessment (3)

Dr. Backfield. Doctoral candidates in clinical, counseling, and school psychology. Theory and practice of psychological testing; focus on cognitive assessment.

CCPX 5333. Practicum in clinical assessment (3)

Dr. Backfield. 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)

Dr. Verdeli. 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 to include Psychoeducational, Cognitive Behavioral, Interpersonal, and Psychodynamic. Emphasis will be upon a comparison of the theoretical foundations and techniques across paradigms.

CCPX 5532. Clinical issues: children from diverse backgrounds

Professor Miller. Open to all students. The course will focus upon current research on risk and resiliency factors developed from within epidemiological, social, and intra-psychic perspectives.

Research findings will be discussed within the context of theories of development.

CCPX 5533-CCPX 5534.

Research methods in clinical psychology (3 each semester)
CCPX 5533 Fall: Professor
Bonanno. CCPX 5534 Spring: Dr.
Tower. 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)

Professor Rosa. Doctoral students in clinical, counseling, school psychology, speech and hearing, learning disabilities, special education, and pre-doctoral students providing intake services at the Teachers College Clinic. Introductory didactic and practice seminar in clinical interviewing.

CCPX 5542. Psychoanalytic issues: theory and research (2–3) Examination of selected topics in psychoanalytic theory and technique, e.g., dreams, transference, autobiographical memories.

CCPX 5544. Cross-cultural issues in psychopathology, resilience and coping (3) Professor Lapidus. Doctoral and masters students in psychology, social work and public health. Others by permission. Examination of pathology and resilience in the context of cultural patterns of coping with developmental life tasks and reactions to stress. Special fee: \$50.

CCPX 5546. Research perspectives on critical social problems (3)

Masters and doctoral students. Exploration of research and theory emerging from the interface of social and clinical psychology. Topics include AIDS, violence, help and help-seeking, and aging and mental health.

CCPX 5610. Clinical psychology colloquium (0)

Professor Bonanno (Coordinator), Clinical faculty and guest speakers. Permission required.

CCPX 5630. Case conference (0) Professor 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. Yourman. 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 of assessment, intake, educational, or abuse prevention family services (1–3) TBA. Permission required. For post-internship students in clinical, and counseling, school psychology, and qualified doctoral and

pre-doctoral supervisors of services in the Teachers College Clinic or in the community. Seminar and supervised practice in the teaching and supervision of clinical assessment and intake.

CCPX 6335. Practicum in clinical intervention (3–4; 0–2 during Summer)

Professor Farber. Permission required. For doctoral students in clinical psychology, two semesters, 4 points each semester. Supervised practice in psychotherapy as staff members of the Center for Psychological Services. Special fee: \$100 each semester.

CCPX 6336. Advanced practicum in clinical intervention (3–4; 0–2 during Summer) Professor Geller. Permission required. Prerequisite: CCPX 6335. For third-year doctoral students in clinical psychology. Special fee: \$100 each semester.

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 6430Z. Internship in clinical psychology (0)
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 (2–3) 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

Professor Backfield. 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 (2–3) Dr. Kosseff. Permission required. British and American schools of object relations; discussion of the role of such clinical phenomena as internalization, splitting, regression, and projective identification.

CCPX 6538. Advanced object relations theory (2–3)
TBA. Permission required. Prerequisite: CCPX 6534. Emphasis on clinical material illustrative of object relations phenomena.

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

CCPX 8900. Dissertation advisement (0)

Psychology in Education

Program Coordinator: Professor Elizabeth Midlarsky

Degree Offered:
Master of Arts (M.A.)
Two Tracks:
Applied Psychology (Code: TXA)
General Psychology (Code: TXG)

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.

Program Description:

The Applied Psychology 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.

With a Master of Arts degree, graduates can find employment in research centers, social service agencies, and hospitals. Through their interaction with faculty in the Clinical Psychology program, they also have the opportunity to strengthen

their candidacy for doctoral study in psychology. 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. Please note that differences between the masters-level and doctoral-level requirements can reduce the number of master's credits that will be accepted for transfer to a doctoral program.

Degree Requirements:

The program for the Master of Arts (M.A.) degree in Psychology in Education: Applied Psychology requires 32 credits of coursework and a special project. The program is built around an 18-credit core of courses. Degree requirements may be completed on a full-time basis in an academic year (two semesters), a calendar year (two semesters), 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 credits, at least 18 of which must be taken in Psychology. A special project is also required. This program may be completed in an academic year (two semesters) a calendar year (two semesters plus summer), or its equivalent in part-time study.

The basic curriculum includes:

Required courses (total of six):

- CCPX 4010 Psychological perspectives on critical social problems (3), Fall or Spring
- CCPX 4038 Comparative psychotherapies (3), Fall or Summer

Or

- CCPX 4035 Personality and behavior change (3), Spring
- CCPX 5032 Personality and psychopathology (3), Fall or Spring

• CCPX 5533 Research methods in clinical psychology (3), Fall

Two courses (totaling 6 credit hours) chosen from the following:

- CCPX 4000 Introduction to applied psychology (3), Fall
- CCPX 4030 Psychology of adjustment (3), Fall
- CCPX 4150 Forensic psychology (3), Fall
- CCPX 4230 Fieldwork in applied psychology (3), Spring or Summer
- CCPX 4900 Independent study (3), Fall, Spring, Summer
- CCPX 5020 Emotions in health and psychological practice (3), Fall
- CCPX 5034 Developmental psychopathology (3), Summer
- CCPX 5045 Psychotherapy, religious diversity & spirituality (3), Spring
- CCPX 5544 Cross-cultural issues in psychopathology, resilience, and coping (3), Spring
- CCPX 5546 Research perspectives on critical social problems (3), Fall, Summer
- HBSK 5033 Human clinical neuropsychology

Suggested Out-of-Department Electives:

Three of the elective courses must be non-CCPX and non-CCPJ courses to meet the College's foundations requirement. The following are among many that meet that requirement:

- HBSS 4110 Health promotion for children and adolescents (3)
- HBSS 4113 Human sexuality education (3)
- HUDK 4020 Theories of human development (3)
- HUDK 4120 The empirical study of human development (3)
- HUDK 4121 Development and Psychopathology
- HUDM 4050 Introduction to measurement (3)

• HUDM 4120 Basic concepts in statistics (3), or HUDM 4122, Probability and statistics (3)

Departmental electives:

- CCPJ 4064 Theories of Counseling
- CCPX 4032 Assessment and treatment of alcohol and chemical dependency (3)
- CCPX 4036 Psychology of human intimacy (3)
- CCPX 4120 Psychotherapy through film and fiction (3)
- CCPX 4121 Psychology and Shakespeare (3)
- CCPX 4125 Women and mental health (3)
- CCPX 4126 The mother-child matrix (3)
- CCPX 6532, 6533 Special topics in clinical psychology (Topics vary) (3)

Be sure to consult with the Program Coordinator about program selection.

Please refer to course descriptions listed under Clinical Psychology: Courses

Chair: Professor James H.

Borland

Location: 306 Main Hall Telephone: (212) 678-3765

Programs:

Curriculum and Teaching
Early Childhood Education
Early Childhood Special
Education
Elementary/Childhood
Education, Preservice
Gifted Education
Learning dis/Abilities
Reading and Learning
dis/Abilities (Offered jointly
with the Department of
Health and Behavior Studies)

Faculty:

Professors:

Lucy McCormick Calkins Celia Genishi Sharon Lynn Kagan D. Kim Reid Frances Schoonmaker Leslie R. Williams Karen Zumwalt

Adjunct Professors:

Lyn Corno Beatrice Fennimore

Associate Professors:

James H. Borland A. Lin Goodwin Barbara Kiefer Nancy Lesko Susan L. Recchia Marjorie Siegel Celia Oyler

Adjunct Associate Professors:

Joann Jacullo-Noto Sabrina Hope King Lisa Wright

Assistant Professors:

Michèle Genor Michelle Knight Anne Sabatini

Adjunct Assistant Professors:

Leonard Barham
Janet Andron Hoffman
Lori Langer de Ramirez
Eileen Marzola
Diane Newman
Carol Prendergast
Judy Randi
Robert Southworth

Lecturers:

Lynne Bejoian Susan Stires

Instructors:

Lynne Bejoian Vicki Garavuso Anne Glass Tricia Giovacco-Johnson Tamara Glupczynski Jennifer Goodwin John Grav Britt Hamre Dawn Horton Linda Kasarjian Jeffrey Libby Roberta Newton Nadjwa Norton Victoria Puig Mary Rowe Nadine Ruzzier Mary Shelley Thomas Jan Valle Donna Volpitta

For information about faculty and their scholarly and research interests, please refer to the "Faculty" section of the Catalog.

Departmental Mission

The two broad goals of the Department of Curriculum and Teaching are to:

1. Contribute to the fields of early childhood education, early childhood special education, educational and instructional leadership, general curriculum design and theory, gifted education, learning dis/Abilities, supervision and curriculum development, and teacher education.

2. Prepare prospective teachers and other professionals to assume leadership roles in educational programs for learners of all ages.

We aim to educate leaders who will engage in inquiry into, and reform of, curriculum, teaching, the organization of schools, and teacher education. We are committed to understanding and working with children and adults in culturally and socially diverse field settings (e.g., schools, centers, homes, workplaces, neighborhoods). We approach our work from a critical and historical perspective, and cultivate an ethic of care and rigorous scholarship, taking collaborative approaches to inquiry, teaching, and governance. We respect broad methods of learning and inquiry, and believe in the need for both qualitative and quantitative research methods.

Our intellectual and theoretical roots are deep in the Progressive Education tradition, which places high priority on direct experience in teaching, learning, and research; integration of the social, emotional, intellectual, and moral dimensions of education; and authentic respect for learners, the process of learning, and the wisdom gained through practice. We view meaning and truth as constructions, literally built through study, conversation, thought, writing, and critique in the context of a learning community.

Faculty and students in the Department participate in a number of interrelated communities, incorporating into them diverse individuals and their respective cultures, life experiences, and points of view. Our central goal is to create, participate in, and nurture many learning communities, while pursuing deeper understanding and mitigation of persistent problems of educational prac-

tice. Along the way, we deliberately educate prospective and experienced professionals and ourselves about ways to initiate, sustain, and provide leadership for these learning communities in a variety of educational settings, including urban contexts and public schools.

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
- —learning dis/Abilities—gifted education
- 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
- —learning dis/Abilities
- -gifted education
- —curriculum development
- —research and theory in curriculum and teaching
- Administrator (such as assistant superintendent, consultant, coordinator, director) in charge of:
 - —curriculum and instruction
 - -curriculum research
 - —professional development
 - -special education
 - —gifted education
- Teacher-leader in programs for learners from infancy to adulthood
- Consultant or educational specialist in a school or nonschool agency.

Preservice and some inservice teacher education programs (the Learning dis/Abilities program, for example) are designed to meet New York State and City teacher certification requirements. Requirements for school administrator/supervisor (SAS) may be met through courses incorporated in the Ed.M. degree.

Programs in Curriculum and Teaching

Areas of Specialization:

Master of Arts

There are two different types of Master of Arts Programs within the Department of Curriculum and Teaching: Preservice Programs and Inservice Programs.

Preservice M.A. programs are designed for people with little or no teaching experience or preparation who are seeking certification in Early Childhood and Early Childhood Special Education,

Elementary/Childhood Education, Gifted Education, or Learning dis/Abilities. The M.A. programs in Early Childhood and Early Childhood Special Education, Elementary/ Childhood Education, and Learning dis/Abilities are registered with the State of New York, and graduates of these programs are recommended for certification in their respective fields. The approved program in Learning dis/Abilities leads to certification in Special Education. Preservice graduates of the M.A. program in Gifted Education can become certified by applying for certification directly to the State Education Department.

The Department plans to offer for the first time in 2002 a Preservice program for Dual Certification in Early Childhood Education and Early Childhood Special Education. For details see Teachers College web site on new Preservice programs.

Inservice M.A. programs are designed for people who are already certified or are provisionally certified to teach in New York, in another state, or on another grade level and who seek a Masters of Arts degree in Curriculum and Teaching, Early Childhood Special Education, Elementary/Childhood Education, Gifted Education, or Learning dis/Abilities. Graduates of inservice M.A. programs can become permanently certified by applying for permanent certification directly to the State Education Department. The approved program in Learning dis/Abilities leads to certification in Special Education.

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. Thirty 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. See specific programs for additional admission requirements.

Doctoral Programs

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, 35 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
- Educational Leadership and School Change
- Gifted Education
- Learning dis/Abilities
- Reading and Language Arts
- Religious Education
- Research and Inquiry in Curriculum and Teaching
- Teaching and Teacher Education
- Urban and Multicultural Education

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 12 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.

C&T 5000 is designed to make beginning doctoral students aware of important problems and issues in curriculum and teaching, to introduce students to methods of formulating questions and to modes of inquiry appropriate to doctorallevel research, and to build a cohesive student cohort.

C&T 5000 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.

Special Application Requirements/Information:

For Inservice M.A. admission, please submit a resume and (a) proof of early childhood, elementary or secondary school teacher certification (provisional or permanent), or (b) proof that you have completed an accredited Elementary, Early Childhood or Secondary teacher preparation/student teaching program. Those who are teaching in an independent school must present proof of at least one year's head teaching experience (which must be assessed and approved by the faculty). (For admission requirements for the Preservice M.A., refer to the section on Elementary/ Childhood Education—Preservice.) Please note that neither the Graduate Record Examination (GRE) nor the Miller Analogies Test is required for application to any of the M.A.

programs in the Department of Curriculum and Teaching.

In addition to the above, Ed.M. students must provide evidence of a minimum of two years of successful teaching experience, and students seeking the Ed.D. degree must provide evidence of a minimum of three years of successful teaching experience or equivalent experience. Please note that neither the Graduate Record Examination (GRE) nor the Miller Analogies Test is required for application to any of the Ed.M. programs in the Department of Curriculum and Teaching.

Admission to programs leading to the Ed.D. degree is determined on the basis of academic ability as evidenced by success in prior academic work and /or other measures of academic aptitude; demonstrable potential for research, field inquiry, or development activities in education; and three years of successful teaching or equivalent experience. All applicants are required to submit Graduate Record Examination (GRE) or Miller Analogies Test 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. The priority deadline for completed applications is January 2nd. The final deadline for completed applications is April 1st. Applications which are received after April 1st or which are incomplete after April 1st will be evaluated in the following year.

Curriculum and Teaching

(Code: TYZ)

Program Coordinators: Professors Borland, Calkins, Kiefer, Knight, Lesko, Schoonmaker, Siegel, and Zumwalt

Degrees Offered:

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

Special Application
Requirements/Information:
Refer to departmental requirements section above.

Program Description:

The Program in Curriculum and Teaching is designed for experienced inservice teachers, administrators, and other educators who 1) have received formal professional preparation in preschool through grade twelve teaching at an accredited college or university; 2) hold, or are eligible to receive, teacher certification; and/or 3) meet the minimum number of years of head teaching experience as indicated for each degree in the "Special Application Requirements/Information" section above.

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 M.A. program in Elementary/Childhood Education—Preservice. 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.

Degree Requirements: All the Master of Arts pro-

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

Master of Arts

The basic curriculum for M.A. students includes:

Curriculum Design (3 points):

 Choose from C&T 4023 Differentiated curriculum for the gifted and talented, C&T 4052 Designing curriculum and instruction, or C&T 5114 Development of multicultural curriculum for the early years.

Teaching Strategies (3 points):

Choose from C&T 4005
 Principles of teaching and learning, or C&T 4121 Early childhood teaching strategies within a social context.

Basic Course in Curriculum Theory (3 points):

- C&T 4002 Curriculum theory and history
- Other than the above courses at least one course addressing one of the following:
 a) subject focus, b) age focus, or c) setting/context focus.

Department requirements:

- C&T 4501 Teacher education lectures (1)
- C&T 4502 Master's project (1)
- A minimum of 12 points in the department
- At least 3 courses (at least 2 points each) outside of the department
- Completion of the action research project (0)

The basic curriculum for M.A. students with a concentration in Reading/Writing (TYZL) includes:

- C&T 4138 Literacy instruction in elementary classrooms (3)
- C&T 4139 Inquiries into literacy instruction in elementary classrooms (3)
- C&T 4151 The teaching of writing (3)
- C&T 4140 Literature for younger children (2–3), or C&T 4141 Literature for older children (2–3), or another course in children's literature.
- C&T 5037 Literacy, culture and the teaching of reading (3)
- Depending on grade level focus and area of interest, choose from: C&T 4835, C&T 5042, C&T 5800, A&HL 4058, HBSK 4072, HBSK 4074, HBSK 5373, HBSK 5376, HUDK 4010, HUDK 5024, HUDK 5091
- At least one of the following: C&T 4113 Early childhood methods and programs (3), C&T 4130 Current issues in elementary education (3), or C&T 4145 The education of youth and adolescents (3)

Department requirements:

- C&T 4501 Teacher education lectures (1)
- C&T 4502 Master's project (1)
- A minimum of 12 points in Department
- At least 3 courses (at least 2 points each) outside
 Department
- Completion of Master's Action Research Project (0)

Master of Education

The basic curriculum for Ed.M. students includes:

Core:

- 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 technology & media systems (3).
- One course in social-historical foundations of curriculum and teaching. Choose from: C&T 4118 Theoretical foundations of childhood education (2–3), C&T 5036 Child and family policy (2–3), C&T 4020 The environments of school (2–3), 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.

Doctor of Education

The basic curriculum for Ed.D. students includes:

Core:

- C&T 5000 Theory and inquiry in curriculum and teaching (6 points each semester, fall and spring, of the first year)
- Research Requirements:
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- C&T 7500 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.

Concentrations include:

- Curriculum Studies
- Early Childhood Education—(specialization)
- Early Childhood Policy
- Early Childhood Special Education
- Educational Leadership and School Change
- Gifted Education
- Learning dis/Abilities
- Reading and Language Arts
- Religious Education
- Research and Inquiry in Curriculum and Teaching
- Teaching and Teacher Education
- Urban and Multicultural Education

Early Childhood Education

(Code: TYD) Program Coordinator: Professor Genishi

Degrees Offered:
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.),
(Code:TYD)

Special Application Requirements/Information:

The department plans to offer a new 48-credit graduate preservice program for those seeking initial Dual Certification in Early Childhood and Early Childhood Special Education (birth through grade two) and a Master of Arts degree. For details see the Teachers College web site on new Preservice programs.

The Master of Arts inservice program in Early Childhood is not accepting applications in 2002–3003.

Through December of 2003, students who seek preparation in Early Childhood Education and are not certified may seek admission to the degree program in Elementary/Childhood Education-Preservice and can concentrate in the early child-

hood grades by completing 14–15 credits of electives in early childhood courses and doing one semester of student teaching at the kindergarten or pre-kindergarten level.

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 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. The priority deadline for completed applications is January 2nd. The final deadline for completed applications is April 1st. Applications which are received after April 1st or which are incomplete after April 1st will be evaluated in the following year.

Program Description:

The program in Early Childhood Education is concerned with the education of children from birth to eight years of age. It is designed to accomplish three major goals: (1) to relate research on the growth, development, and education of young children with practice in current early childhood educational programs, including curriculum development and program assessment and evaluation; (2) to strengthen and augment the competencies of teachers and other educational personnel; (3) to investigate historical, current, and projected issues central to early childhood education; and (4) to

use practice and research to improve public policy.

The main purpose of the Master of Arts programs is to educate graduate students to teach in environments that are diverse and inclusive, across the contexts of homes, schools, and other learning environments for young children and their families. Accordingly, their professional preparation incorporates cultural, pedagogical, political, psychological, and sociological perspectives.

The 60 point Master of Education 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.

The Master of Education 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.

At the doctoral level, the concentration in Early Childhood Education prepares candidates for college teaching, research, policy, and other leadership positions in early childhood education. 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.

The Doctor of Education (Ed.D.) concentration in Early Childhood Policy prepares candidates for leadership positions, college teaching, and research in early childhood policy. 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.

Degree Requirements:

Master of Arts

For requirements of new preservice M.A. program, see Teachers College web site on new Preservice programs.

Master of Education

The basic curriculum for Ed.M. students includes:

- Core:
- C&T 4002, Curriculum theory and history (3)
- C&T 4004, School change (3)
- C&T 4005, Principles of teaching and learning (3)
- C&T 5513, Seminar in early childhood education (3)
- C&T 5514, Seminar in early childhood education (3) or C&T 5036, Child and family policy (2-3)

Electives:

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

The basic curriculum for the Early Childhood Education Policy Concentration includes:

Course requirements for the degree fall into three course categories, totaling 45 credits 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 credits). Second, courses in Human Development will provide analytic policy training and focus (15 credits). A third set of course options (15 credits) 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
- HUDF 5646 Policy seminar
- HUDM 4122 Probability and statistical inference (3)
- C&T 6408 Advanced internship—infancy and early childhood (3)

Electives:

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

Doctor of Education

The basic curriculum for Ed.D. students includes:

Core:

• C&T 5000, Theory and inquiry in curriculum and teaching (6 points each semester, fall and spring, of the first year)

Research Requirements:

- HUDM 4122, Probability and statistical inference (3)
- HUDM 5122, Applied regression analysis (3)
- C&T 7500, 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.

The basic curriculum for Early Childhood Education Policy concentration includes:

Course requirements for the degree include 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 credits. The remaining 51 credits are selected in consultation with an advisor.

Required Departmental Core:

• C&T 5000 Theory and inquiry in curriculum and teaching (6 points each semester, fall and spring, of the first year)

Required Research Core:

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)

- C&T 5502 Introduction to qualitative research in curriculum and teaching (3) or
- HUDF 5645 Policy seminar
- C&T 7500 Dissertation seminar(1-3)
- C&T 7501 Dissertation seminar(1-3)

Required Early Childhood Policy Concentration:

- 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)
- HUDF 4000 Education and public policy (3)
- HUDF 5430 Internship (3)

Other courses are selected in consultation with an advisor.

Early Childhood Special Education

(Code: TEC)

Program Coordinator: Professor Recchia

Degrees Offered:

Master of Arts (M.A.) Master of Education (Ed.M.) Doctor of Education (Ed.D.), (Code:TYD)

Special Application Requirements/Information:

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

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 apti-

tude; 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 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. The priority deadline for completed applications is January 2nd. The final deadline for completed applications is April 1st. Applications which are received after April 1st or which are incomplete after April 1st will be evaluated in the following year.

Program Description:

Early Childhood Special Education is a rapidly expanding field providing early intervention and educational services to infants and young children with disabilities from birth through 8 years of age (including those at-risk for developing disabilities) and their families in home, hospital, and centerbased settings. This program prepares educators to work with young children and their families by emphasizing early development, curriculum, and instructional strategies within a family-oriented, child-focused model. Students are prepared to work with a range of ages and disabilities, and to apply their skills within both inclusive and self-contained settings.

The course of study for the M.A. in Early Childhood Special Education makes provision for students with backgrounds in special education, for students with backgrounds in education but not in special education, and for students with no previous course work in the field of education. As a

result, the number of credits required for graduation and teacher certification and the course of study varies as a function of the student's previous educational history.

Students with special education backgrounds can complete the course of study for the Master of Arts degree by earning 32 credits of course work, as can those with education backgrounds outside the field of special education.

Students with no previous course work in education must complete at least 36 credits in order to obtain the Master of Arts degree and the department's recommendation for provisional certification as a teacher of special education.

The 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.

The Department of Curriculum and Teaching offers a doctoral concentration in Early Childhood Special Education. 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 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.

Degree Requirements:

Master of Arts

Course requirements for M.A. students with backgrounds in Special Education include (minimum of 32 points):

Core (20–24 points):

- C&T 4080 Risk and resilience in early development: Birth – 8 years (2–3)
- C&T 4081 Programs for young children with disabilities (2–3)
- C&T 4082 Assessment of young children with exceptionalities (2–3)
- C&T 4083 Working with families of young children with disabilities (2–3)
- C&T 4113 Early childhood methods and programs (3)
- C&T 4302 Supervised practicum in the assessment of young children with exceptionalities, or HBSE 4300 Supervised practicum in the educational assessment of exceptional children (3)
- C&T 4308 Pre-Student teaching practicum in early childhood special education
 (3)
- C&T 4708 Observation and student teaching in special education: Early childhood (3)

Special Education Focus (6–9): Students, with the approval of their advisor, will select a meaningful combination of three special education elective courses. These may consist of either three courses within one area of focus, or three courses from diverse areas of focus. Teachers College Breadth (4–6): Two additional TC courses in Programs other than the home program. These courses should be selected carefully, with an eye toward enhancing the students program of study.

Culminating Project (0 points)

Course requirements for M.A. students with Education backgrounds but no previous course work in Special Education include (minimum of 32 points):

Students who are certified/have backgrounds in elementary education, including 6 credits in the teaching of reading, follow the course of study described above with the addition of C&T 4001, Teaching students with disabilities in the regular classroom or HBSE 4002, Adapting curriculum and instruction for children with disabilities (or an approved equivalent). All students should have a minimum total of 24 points in courses in special education by the end of the program.

Course requirements for M.A. students with no background in Education include (minimum of 36 points):

Students with no background in education follow the course of study described above with several additions. First, C&T 4001 Teaching students with disabilities in the regular classroom, HBSE 4002 Adapting curriculum and instruction for children with disabilities, or an approved equivalent will be added to the Core requirement. Second, students must secure a placement (either a paid position or a volunteer position) in a program which serves young children with or without disabilities during their first semester enrolled (or during the semester previous to the one in which they do their student teaching). Third, students may

consider selecting courses in the teaching of reading as part of their breadth requirement.

Master of Education

Course requirements for Ed.M. students 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. 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

The basic curriculum for Ed.D. students includes:

Core:

C&T 5000 Theory and inquiry in curriculum and teaching (6 points each semester, fall and spring, of the first year)

Research Requirements:

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- C&T 7500 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.

Elementary/Childhood Education-Preservice

(Code: TYP) Program Director: Professor Goodwin

Degree Offered: Master of Arts (M.A.)

Special Application Requirements/Information: Applicants who wish to enrol

Applicants who wish to enroll in the Summer or Fall semester should make every effort to meet the January 15 priority deadline. Applications received by April 1 will be considered if space is available. Those who complete their applications after the priority deadline may not have the opportunity to begin student teaching in their first year, even if admitted. Applicants who wish to enroll in the Spring semester must submit their applications no later than the November 1 priority deadline.

Program Description:

This is a 40-point M.A. preservice program for applicants with little or no teaching experience or preparation who are seeking certification at the elementary level, grades 1–6. Extensions for Early Childhood and Middle School levels are possible. The program includes a professional student-teaching sequence from September through May.

Students may complete the program on a full-time or part-time basis; students have the option to complete an accelerated program (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 Department Office) by May 15 prior to the Fall term in which they plan 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.

New 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 credits 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). 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, with permission of the Registrar, 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. Upon successful completion, it may fulfill the course requirement in English, social science, mathematics, and/or science.

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 Board of Education of New York City and applicable State Education Departments for current licensing requirements.

Degree Requirements:

The basic curriculum for M.A. Elementary Preservice students includes:

- The Preservice Core, includes such topics as teaching methods, teaching in urban and culturally diverse settings, curriculum development, alternative models of teaching, social studies curriculum, and classroom management and organization (designated C&T 4123, C&T 4334/5/6 and C&T 4726 in the Fall; C&T 4124, C&T 4143, C&T 4501, C&T 4726 in the Spring). 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 Child Development (2–3)*, such as C&T 4080 Risk and resilience in early development: Birth 8 years
- one course in Educational Foundations (2–3)*, philosophical, historical, sociological etc.
- two courses in Methods of teaching reading (3 points each): C&T 4132 and C&T 4133, to be taken in conjunction with student teaching.
- one course in Methods of Teaching Math (3): MSTC 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

- one course in Special Education Methods (2–3)
- course work in Health Education Methods
- * Appropriate undergraduate courses may be substituted for these requirements; please consult with Preservice faculty.

Gifted Education

(Code: TEI) Program Coordinator: Professor Borland

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

Special Application
Requirements/Information:

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

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 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. The priority deadline for completed applications is January 2nd. The final deadline for completed applications is April 1st. Applications which are received after April 1st or which are incomplete after April 1st will be evaluated in the following year.

Program Description:

The M.A. program in gifted education is designed primarily for teachers, both inservice teachers (those who already hold teaching certificates) and preservice teachers (individuals who have no background in the field of education but wish to become teachers). Preservice students who complete the M.A. degree in the Program in Gifted Education become certified as elementary or secondary school teachers by applying directly to the State Education Department for Certification.

Students can also obtain the New York State certificate extension in gifted education as part of the preservice program in early childhood education (which also confers certification to teach students from birth through second grade) and as part of the elementary/childhood education preservice program (which also confers certification to teach students in grades one through six).

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.

Degree Requirements:

Master of Arts

The basic curriculum for M.A. students includes: The nature of giftedness (6–9)* Required:

- C&T 4021 Nature and needs of gifted students (2–3)
- C&T 5023 Exceptionality and intelligence: theoretical approaches (2–3)

Elective:

• C&T 4025 Educating the young gifted child (2–3)

Teaching Gifted Students (9–12)* Required:

- C&T 4023 Differentiated curriculum for gifted students (2–3)
- C&T 5023 Planning and implementing programs for gifted students (3)

Elective:

- C&T 4822 Instructional models in the education of gifted students (1–2)
- C&T 5810 New approaches to identifying and educating gifted students (1–2)
- C&T 5902 Problems in special education: giftedness (1–3)

Out-Of-Department Requirements (9–12):

- Preservice students must take two 3-point courses in teaching reading (6) and one additional pedagogy course to be determined in consultation with their advisor (3)
- *Inservice students* select additional courses in consultation with their advisor

Student Teaching (3–6):

- Preservice students take C&T 4702 Observation and student teaching in special education: gifted (3) twice, in separate semesters
- *Inservice students* take C&T 4702 Observation and student teaching in special education: gifted (3) one semester.

Culminating Project (0):

 A culminating project, arranged in consultation with an, that demonstrates the student's ability to integrate your theoretical knowledge with practical problems and issues in gifted education.
 *The number of points in the first two categories must equal

Doctor of Education

The basic curriculum for Ed.D. students includes:

Core:

17-20.

 C&T 5000 Theory and inquiry in curriculum and Teaching (6 points each semester, fall and spring, of the first year)

Research Requirements:

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- C&T 7500 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.

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 adviser.

Learning dis/Abilities

(Code: TEN) Program Coordinator: Professor Reid

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

Special Application Requirements/Information:

A student in the Master of Arts program who wants to qualify for New York State teaching certification must complete the prescribed program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. The new MA programs in Learning dis/Abilities will begin in 2002-2003. However, there may be some necessary changes in course content and scheduling that might arise as we put the new programs into place. Please check with an advisor throughout the academic year. This program is for students who already have or who want to take simultaneously a teaching certificate in some field within general education, at elementary, middle school, or high school levels. Applications are accepted throughout the year.

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 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. The priority deadline for completed applications is January 2nd. The final deadline for completed applications is April 1st. Applications which are received after April 1st or which are incomplete after April 1st will be evaluated in the following year.

Program Description:

Master of Arts

The Master of Arts program is designed to prepare teachers to work with students with academic difficulties. This multifoundational, inquiry-based program is grounded in the assumption that successful teachers of students with learning dis/abilities must have a thorough understanding of the nature of society and its impact on learning and learning dis/abilities and must also be knowledgeable about studying and empowering students as well as planning and evaluating instruction. They must be prepared to collaborate with others in inclusive communities as well as in oneto-one or small-group settings. The inservice program requires a minimum of 34 points. Preservice students must take a minimum of 36 points. Graduates who meet the requirements of the program will be recommended for the New York State Certificate in Special Education. Because the programs are performancebased, both preservice and inservice students must be engaged in either student teaching or professional teaching during both fall and spring semesters.

Doctor of Education

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 course work in learning dis/abilities, and undertake dissertation research on a problem related to learning dis/abilities.

Degree Requirements:

Master of Arts

The basic curriculum for M.A. students includes:

- C&T 4000 dis/Abilities in contexts (3)
- C&T 4001 Teaching students with dis/abilities in inclusive classrooms (3)
- C&T 4046 Introduction to learning dis/abilities (2)
- C&T 4047 Sociocultural approaches to instruction for students labeled learning dis/abled (2)
- C&T 4048 Diagnosis and remediation of math learning dis/abilities (2)
- C&T 4853 Multisensory teaching of basic language skills (2)
- C&T 4049 Educational accommodations and modifications for students labeled learning dis/abled (2)
- C&T 4301 Educational assessment (3)
- C&T 4705 Student teaching in learning dis/abilities (8 points in two semesters)
- C&T 5905 Seminar in teaching students with dis/abilities: learning dis/abilities (2)
- C&T 6501 Studies in Curriculum and Teaching: Content area literacies (2–3)
- HBSK 4072 Theory and techniques of reading assessment and intervention (3)
- HBSK 5373 Practicum in diagnosis of reading difficulty (3)
- C&T 4501 Teacher education lectures (0–2)*

 C&T 4504 Child abuse & drug abuse detection and reporting (0)**

*Students must enroll for, and meet the requirements of, C&T 4501 in order to meet New York State Certification requirements for work in multicultural education. ** Students must enroll for, and

** Students must enroll for, and meet the requirements of, C&T 4504 in order to meet New York State Certification requirements. This course costs \$10.00 and meets for 6 hours over the course of two Friday afternoons.

Elective courses may be chosen in consultation with an advisor. Selection is influenced by factors such as previous academic background and career objectives. Preservice students must take courses in literacy for general educators (2–3 points), child or adolescent literature (2–3 points), and classroom management (3 points).

Doctor of Education

The basic curriculum for Ed.D. students taking a Learning dis/Abilities concentration includes:

Core:

 C&T 5000 Theory and inquiry in curriculum and teaching (6 points each semester, fall and spring, of the first year)

Research Requirements:

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- C&T 5502 Introduction to qualitative research in curriculum and teaching (2–3)
- C&T 7500 Dissertation seminar in curriculum and teaching (1–3)
- C&T 7501 Dissertation seminar in curriculum and teaching (1–3, optional)
- One course in qualitative research methods (2–3)
- An additional course in research methods specific to the dissertation (2–3)

- C&T 6507 Advanced seminar-learning dis/abilities (12 points, variable topics, repeated four semesters)
- Other courses in foundations of Learning dis/Abilities (12–15) selected in consultation with an advisor

Reading and Learning dis/Abilities

(Code: TZB)
Offered jointly with Department of Health and Behavior Studies.

Program Coordinators: Professor Reid and Professor Perin (Health and Behavior Studies)

Degree Offered: Master of Education (Ed.M.)

Special Application Requirements/Information: Applicants must hold a graduate M.A. degree in Learning dis/Abilities or Reading from either Teachers College or another accredited institution. Admission decisions are based upon undergraduate and graduate academic records (a GPA of B+ or better is required), letters of recommendation, and a personal statement. Applicants must also have at least three years of full-time teaching experience either at the time of admission, or before the granting of the degree.

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

Program Description:

The Reading and Learning dis/Abilities Ed.M. requires a minimum of 60 points and is offered to applicants who have

either teacher certification or a master's degree in a related area and desire additional, more specialized training within the reading specialist and/or learning dis/abilities areas, without making the extended commitment required to undertake pursuit of a doctoral degree. Graduates are eligible for state certification as a reading teacher and as a teacher of special education. Applicants who have neither a master's degree nor teaching certification in either Reading Specialist or Learning dis/Abilities should apply to the Master of Arts program in one of these two areas. Subsequent to completing this Master of Arts degree, persons are eligible to apply for admission to the Ed.M. program in Reading and Learning dis/Abilities.

Degree Requirements:

Courses marked with an * are required courses. Other courses necessary to fulfill each core should be selected in consultation with an advisor.

The basic curriculum for Ed.M. students includes: Reading and Learning dis/Abilities Core (25):

- C&T 4000 dis/Ability in contexts (3)
- C&T 4001 Teaching students with dis/abilities in inclusive classrooms (2–3)
- C&T 4046 Introduction to learning dis/abilities (2–3)*
- C&T 4047 Sociocultural approaches to instruction for students labeled learning dis/abled (2)*
- C&T 4048 Diagnosis and remediation of math learning dis/abilities (2–3)*
- HBSK 4072 Theory and techniques of reading assessment and intervention (3)*
- HBSK 4074 Reading comprehension strategies and study skills (3)*
- HBSK 4077 Adult basic literacy (3)

- C&T 4136 Methods and materials for reading instruction (2–3)
- C&T 4705 Student teaching in learning dis/abilities (3)*
- C&T 4853 Multisensory teaching of basic language skills (3)
- HUDK 5090 Psychology of language and reading (2–3)
- HBSK 5099 Theories of cognitive processes in writing
 (3)
- HBSK 5376 Practicum in intervention with reading and school subject difficulty (3)*
- HBSK 5377 Advanced practicum in intervention with reading and school subject difficulty (3)
- HBSK 5080 Seminar in consultation and evaluation in reading (3)*
- C&T 4501 Teacher education lectures (0–2)*
- C&T 4504 Child abuse & drug abuse detection and reporting (0)*

Testing and Measurement Core (13):

- C&T 5905 Seminar in teaching students with dis/abilities: learning dis/abilities
 (2-3)*
- HUDM 4050 Introduction to measurement (2–3)*
- C&T 4301 Practicum in educational assessment (3)*
- HBSK 5373 Practicum in diagnosis of reading difficulty (3)*
- HBSK 5374 Advanced practicum in the psycho-educational assessment of reading difficulties (3)*

Learning and Development Core (9):

- HUDK 4020 Theories of human development (2–3)
- HUDK 4022 Developmental psychology: childhood (2–3)
- HUDK 4023 Developmental psychology: adolescence (2–3)
- HUDK 4027 Development of mathematical thinking (3)

- HUDK 4029 Theories of human cognition and learning (2–3)
- HBSE 4076 Introduction to neuropsychology (3 points)
- HBSE 4079 Language development and habitation: The foundations (2–3)
- HUDK 4121 Developmental psychology (2–3)
- HBSK 5070 Neural bases for language and cognitive development (3)

Electives (13):

The remaining points should be taken in courses that reflect the emphasis of the individual student's program. Those points may include any courses listed above, or in other areas. Electives should be selected in consultation with an advisor.

Courses:

C&T 4000. dis/Ability in contexts (3)

Professor Reid. Enrollment limited to 35 students. For students preparing to be both general and specialeducation teachers. Exploration of the historical, legal, cultural, and social/emotional experiences and representations of the characteristics of people across the full range of disabilities. The course focuses on life contexts, including education, family (caregiver), employment, and independent living as well as life-span transitions. It draws on a wide range of interdisciplinary scholarship and ways of knowing. Special fee: \$25.

C&T 4001. Teaching students with dis/abilities in inclusive classrooms (3)

Professor Ferri or Reid. Enrollment limited to 35 students. For both 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. Special fee: \$25.

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 Knight or Dr. Southworth. 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

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 4046. Introduction to learning dis/abilities (2–3)

Professor Reid. 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 lifespan contexts and their social and legal ramifications, focusing most specifically on medical, cognitive/information processing, and sociocultural frameworks. Special fee: \$25.00.

C&T 4047. Sociocultural approaches to teaching students labeled as learning dis/abled (2–3)

Professor Reid. Planning and implementing sociocultural, multicultural, and inquiry-based procedures for teaching students with substantial academic difficulties and for monitoring that instruction in a range of school environments. Emphasis is on classroom discourse and includes both oral and written language instruction. Pre- or co-requisite, C&T4046. Special fee \$25.00.

C&T 4048. Diagnosis and remediation of math learning problems (2–3)

Faculty. Techniques for identifying and remediating problems affecting math mastery in children labeled learning disabled. Review of relevant research. Evaluation of materials, methods, tests, and

remedial techniques in resource room programs, regular and special classes, and individual remedial instruction.

C&T 4049. Educational accommodations and modifications for students labeled learning dis/abled (2)

Professor Reid. Educational assessment and intervention for students labeled learning disabled in included settings. Special fee: \$25.00.

C&T 4051. Supervision for elementary and secondary schools

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 or Oyler or Zumwalt. Application of models for designing curriculum and instruction. Students design curriculum in collaborative groups.

C&T 4078. Curriculum and teaching in urban areas (2–3) Professor Knight. Analysis of social context and resources for curriculum and teaching in urban areas.

C&T 4080. Risk and resilience in early development: Birth – 8 years (2–3)

Professor Recchia. A first course in early childhood special education for majors and non-majors. Development of infants and young children, birth through 8 years of age, with and without disabilities. Cross-categorical.

C&T 4081. Programs for young children with disabilities (2–3) Professor Recchia. Curriculum development and instructional strategies for young children with special needs birth to age 8, in home and center-based programs.

Organization and planning of activities and intervention models; analysis and selection of materials; community resources. Cross-categorical and transdisciplinary.

C&T 4082. Assessment of young children with exceptionalities (2–3)

Professor Recchia or faculty. An introduction to formal and informal assessment strategies and their application to work with young children.

C&T 4083. Working with families of young children with disabilities (2–3)

Professor Recchia or faculty. Current and historical perspectives on parent involvement in the special education and rehabilitation of infants, children, and youth with disabilities. Emphasis on strategies and materials to facilitate a continuum of parent and family participation. Special fee: \$10.

C&T 4113. Early childhood methods and programs (3) Professor Genishi or Williams or 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 4118. Theoretical foundations of childhood education (2–3)

Professor Genishi. Major theories relevant to contemporary research and practice in early childhood and childhood education: learning theory, Piaget's interactionism, Vygotsky's sociocultural developmental theory, and Bruner's theory of pragmatics and context in development.

C&T 4119. Issues and interdisciplinary methods for working with parents of young children (2–3)

Dr. Hoffman. Issues such as separation, problematic behaviors, and assessment are examined in the development of interdisciplinary strategies for working with parents of normal, at risk, and handicapped young children. Sessions are taught by an interdisciplinary team of faculty and invited speakers from special education, clinical psychology, early childhood education, psychiatry, pediatrics, and social work.

C&T 4121. Early childhood teaching strategies within a social context (2–3)

Professor Genishi or Williams or faculty. Exploration of the teaching strategies used in early childhood education through analysis of the social contexts out of which they have arisen. Emphasis on assimilation and application of differing strategies through workshop format.

C&T 4122. Issues in parenthood and education (2–3)

Dr. Hoffman. Examination of relevant theory and research on parent development. Topics include transition to parenthood, pregnancy, parenting children of different ages, at-risk parents, parenting the special needs child, and single parenthood. Methods of working with different parent populations are addressed.

C&T 4123. Curriculum and instruction in elementary education (2–3)

Professors Genor, Goodwin, 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 ands 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 Genor, Goodwin, 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. Current issues in elementary education (2-3) Professor Zumwalt or faculty. Required for all Elementary Education in-service majors and open to non-majors. A critical study of curriculum and instructional practices in American elementary schools. Curriculum trends in subject areas such as reading, social studies; trends and intended/unintended consequences of practices in areas such as management and discipline; teacher expectancy and accountability. Special attention will be paid to the role of educational leadership.

C&T 4132. Learning and teaching in the primary reading/writing classroom (3)

Professor Calkins, Kiefer, or Siegel. Permission required. Examines principles of literacy learning in young children and introduces theories, practices, and materials for teaching reading/writing in primary grades.

C&T 4133. Learning and teaching in the intermediate reading/writing classroom (3)
Professors Calkins, Kiefer, or
Siegel. Permission required. Examines strategies for teaching, organizing and assessing reading and writing in intermediate grades.

C&T 4136. Methods and materials for reading instruction (2–3) Professor Kiefer or Professor Siegel. 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 4138. Literacy instruction in elementary classrooms (3) Professor Calkins or Siegel. Current perspectives and methods for teaching reading and writing in K–6 classrooms. Emphasis on interrelationship of literacy learner, classroom environment, assessment practices, and teaching methods.

C&T 4139. Literacy instruction in elementary classrooms (3) Professor Calkins or Siegel. Prerequisite: C&T 4138. Critical investigation of trends and issues in teaching reading and writing in K-6 classrooms. Emphasis on teacher and learner inquiries into literacy and literacy instruction.

C&T 4140. Literature for younger children (2–3) Professor Kiefer. 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)

Professor Kiefer. Interpretive and critical study of literature suitable for later elementary grades and junior high school. Consideration of promising practices in using literature in school groups.

C&T 4143. Social studies in the elementary and middle school (2) Professors Genor, Goodwin, 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. The education of youth and adolescents (2–3) Professor Knight. A comprehensive examination of adolescent development and learning as they relate to issues of curriculum, teaching, and learning.

C&T 4151. Teaching of writing

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 inservice 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. Designed especially for cooperating teachers, this course will help students develop supervisory skills through case studies, role playing, and analysis of teaching. Lab fee: \$5.

C&T 4161. The teacher: sociohistorical, cultural contexts of teaching (2–3)

Professor Zumwalt or faculty. Exploration of dilemmas facing teachers today through analysis of historical studies, recent reports, and autobiographical reflections. Consideration of teacher development theories and recent proposals regarding teachers. Prerequisite: 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. Supervised practicum in the educational assessment of exceptional children (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 educationalenrichments, accommodations, and modifications. Conducted in the

DEPARTMENT OF CURRICULUM AND TEACHING

Center for Educational and Psychological Services or in appropriate community facilities. Course meets double sessions. Prerequisite: C&T4047. Lab fee: \$150.

C&T 4302. Supervised practicum in the educational assessment of young children with exceptionalities (2–3) Professor Recchia and Faculty. Permission required. Prerequisite: C&T 4082. Participation in educational assessment of young children with exceptionalities. Analysis of observational and test data; formulation of educational interventions. Conducted in the Center for Infants and Parents and the Center for Toddlers and Parents. Course meets one full day a week. Lab fee: \$150.

C&T 4308. Pre-student teaching practicum in early childhood special education (3)

Professor Recchia. This course is a practicum for students in the Early Childhood Special Education Program that serves as a prerequisite for student teaching. Students will work on and off campus to develop competencies in such skills as C.P.R., program planning, and working effectively with children and families. Special fee: \$50.

C&T 4334-C&T 4336. Models of teaching: practicum

Professor Sabatini and Staff. Permission required. Class meets for eight sessions; specific dates posted each semester. A laboratory course for developing teaching skills and strategies based on contemporary models (group process, cooperative learning, synectics, role play, concept development). Application of the models to field problems in teaching and curriculum design.

C&T 4334. Group process strategies (1)
C&T 4335. Cooperative learning (1)
C&T 4336. Synectics and role

C&T 4336. Synectics and role playing (1)

C&T 4501. Teaching and learning in the multicultural classroom (1)

Dr. Langer de Ramirez. Open to preservice and inservice students in all subject departments. Class meets for seven sessions (consult department secretary or instructor for dates). Student diversity (characterized by gender, race, ethnicity,

language, special needs, and sexual orientation) is examined in relation to decisions about teaching methodology, curriculum, instructional materials, student grouping, home-school-community relationships, and teachers' professional growth and development.

C&T 4502. Master's project (1) Professors Lesko, Kiefer, Siegel or Faculty. Permission required. Required for TYZ Master's students. Students work to develop proposals to initiate required Master's action research project.

C&T 4503. 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 4504. Child abuse & substance abuse detection and reporting (0–2)

Dr. Jacullo-Noto. Specialized training in the Detection and Reporting of Child Abuse and the Detection of Drug and Alcohol Abuse required for teacher certification by the State of New York.

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. 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. One semester is to be in an inclusive setting and one semester in another inclusive or more traditional special education setting.

C&T 4708. Student teaching-infancy and early childhood (3) Professor Recchia and Faculty. 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 4726z. Professional laboratory experiences/ student teaching (year-long) in elementary education (4–6)

Professors Genor, Goodwin, Ovler, Sabatini 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 threeweek practicum period, followed by a ten-week student teaching experience; students spend a minimum of 3 1/2 days in the classroom each week. Assignments to classrooms provide an emphasis on education for both younger and older children in a range of 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 (semester-long) in elementary education (4-6) Professors Genor, Goodwin, Oyler, Sabatini 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 3 1/2 days in the classroom each week. Assignments to classrooms provide an emphasis on education

for both younger and older children in a range of 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 4726z 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 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 4900. Section 010. Seminar in curriculum & teaching: Learning dis/abilities (2–3) Professor Reid. Prerequisite C&T 4049. Exploration of the following roles teachers of students labeled as learning disabled play in today's schools: teacher-as-scholar-practitioner, teacher-as-researcher, and teacher-as-change-agent.

C&T 5000. Theory and inquiry in curriculum and teaching (6 points each semester, fall and spring).

Faculty. Required of and limited to first-year 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 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 or 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. Prerequisite: C&T 4136, or an equivalent course in the teaching of reading. Examines current practices of reading instruction in light of theory and research on literacy as a social, cultural and political practice.

C&T 5042. Special topics in children's literature (3) Professor Kiefer. 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, inservice 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 curriculum 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 partic-

ipate 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 practicum-giftedness (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 practicum-learning dis/abilities (1–6)

Faculty. Permission required. Guided experiences for advanced students in Learning Disabilities. Supervised group field visits. Preservice internships arranged. Students submit reports analyzing experiences.

C&T 5308. Advanced practicum-infancy and early childhood (1–6)

Professor Recchia. 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 or Williams. Permission required. Supervised in-service competency-based 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 5500. Development of the curriculum field (2–3) Professor Schoonmaker. Permission required. Critical analysis of current and historical developments in the theory and practice of curriculum making.

C&T 5502. Introduction to qualitative research in curriculum and teaching (2–3)
Professors Genishi, Kagan, or 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, or Williams. Required of all second-year doctoral students in early childhood education and early childhood special education and open to other post-Master's students with permission. Examination of underlying issues and currents in early childhood education, with formulation of initial research plans.

C&T 5515. Infancy research seminar (1–6)

Professor Recchia. Permission required. Research in infant development is facilitated and coordinated through training in a variety of research methods and a seminar.

C&T 5902. Independent study-giftedness (1–4)

Professor Borland. Permission required. Qualified students work under guidance on practical research problems. Proposed work must be outlined prior to registration; final written report required.

C&T 5905. Seminar in teaching students with dis/abilities: learning dis/abilities (1–4) Professor Reid. Permission required. Students work in small groups under guidance on practical problems related to teacher-asscholar practitioner, teacher-aschassroom researcher, and teacher-as-change agent. Emphasis on ethical practices for diverse learners. Special fee: \$25.00.

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 5913. Independent study of infants and parents (3) Professor Recchia. Permission required. Workshop approach to the study and support of infants and their parents.

C&T 6200-C&T 6201. Field study in designing curriculum and instruction (2–8) 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 internship-learning dis/abilities (1–6) Professor Reid. Permission required. Post-master's level. Intensive in-service internship designed to meet individual student's needs. Students submit reports analyzing experiences.

C&T 6408. Advanced internship-infancy and early child-hood (1–6)

Professor Kagan or 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 Professors Schoonmaker, Goodwin, Oyler, 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. Pre-service (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-C&T 6504. 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. 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 (3–12) Professor Reid. For doctoral students in learning disabilities and related fields. Recent developments in theory and research as related to learning disabilities from psychological, educational, sociological, and other sources.

C&T 6508. Advanced seminarinfancy 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)
Professor Siegel. 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)
Professor Kiefer. 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-C&T 6901. 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, or 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 or 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 4803. Facing history (1 to 2) Mr. Nelson. A workshop designed for educators who want to think about innovative approaches to citizenship education. Participants will have the opportunity to investigate the consequences of racism, anti-Semitism, and violence in society and ways to teach responsibly abut these issues in the classroom. Case study of the events that led to the Holocaust will be used to explore the significance of decisions by individuals and groups in history and the connections to the choices adolescents face today.

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 three-day 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 Kiefer or 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 2–4)
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. Four-week summer session. Materials fee: \$30.

C&T 4854. Multisensory teaching of basic skills I (non-credit or 1) Ms. Rowe. Prerequisite: C&T 4853. Two day-long 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 day-long 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 out 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. New approaches to identifying and educating gifted students (non-credit, 1 or 2) Professor Borland and Dr. Wright. This three-day 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.

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.

DEPARTMENT OF HEALTH AND BEHAVIOR STUDIES

Chair: Professor Charles E.
Basch
Location: 531A Thorndike Hall
Telephone Number:
(212) 678-3964
Applied Educational
Psychology:
(212) 678-3942
Health Education:

(212) 678-3964 Nursing Education: (212) 678-3120 Nutrition:

(212) 678-3950 Special Education: (212) 678-3880

Email: ceb35@columbia.edu Fax: (212) 678-8259

Web Address:

http://www.tc.columbia.edu/~academic/health

Programs:

Applied Educational Psychology:

Clinical Neuropsychology Reading Specialist Reading and Learning Disabilities* School Psychology

Health Studies:

Health Education
Nursing Education
Nutrition
Nutrition Education
Nutrition and Public Health
Applied Physiology and
Nutrition**
Community Nutrition
Education
Dietetic Internship Program

Special Education:

Physical Education

Administration of Special Education
Applied Behavior Analysis Behavioral Disorders
Blindness and Visual Impairment
Cross-Categorical Studies
Deaf and Hard of Hearing
Guidance and Habilitation
Instructional Practice
Mental Retardation and
Intellectual Disability

Physical Disabilities Research in Special Education Supervision of Special Education

Teaching of American Sign Language as a Foreign Language

* Offered jointly with the Department of Curriculum and Teaching **Offered jointly with the Department of Biobehavioral

Faculty:

Studies

Professors:

John P. Allegrante (Health Education)

Charles E. Basch (Health Education)

Isobel R. Contento (Nutrition)
R. Douglas Greer (Special
Education, Applied Behavior
Analysis, and Behavioral
Disorders)

Linda Hickson (Special Education)

Dennis E. Mithaug (Special Education)

Kathleen A. O'Connell (Nursing Education)

Adjunct Professors:

Barbara Krainovich-Miller (Nursing Education) Clarence E. Pearson (Health Education)

Associate Professors:

Marla R. Brassard (School Psychology)

Robert E. Kretschmer (Special Education and ASL as a Foreign Language)

Dolores Perin (Reading Specialist)

Stephen T. Peverly (School Psychology)

Barbara C. Wallace (Health Education)

Adjunct Associate Professors:

Caroline Camuñas (Nursing Education) Robert E. Fullilove, III (Health Education)

Mindy Fullilove (Health Education)

Toni Liquori (Nutrition) Margaret G. E. Peterson (Health Education) John T. Pinto (Nutrition) Lora A. Sporny (Nutrition)

Visiting Associate Professors:

C. Ronald MacKenzie (Health Education)

Elizabeth A. Walker (Health Education)

Assistant Professor

Susan Garni Masullo (Reading Specialist)

Adjunct Assistant Professors:

Sheila Amato (Special Education)

Sharon R. Akabas (Nutrition) Lynne M. Bejoian (Special Education)

Janice Berchin-Weiss (Special Education)

Bonnie Bernstein (Nutrition) Gay Culverhouse (Special Education)

Craig Demmer (Health Education)

Diane Dillon (School Psychology)

Karen Reznik Dolins (Nutrition) David Erlanger (School

Psychology) Roseanne C. Gotterbarn

(School Psychology)
Thomas M. Kelly (Special

Education)
Doleen-Day Keohane (Special

Education)
Pamela Donofrio Koch

(Nutrition)

Michael Koski (School Psychology)

Susan Lipkowitz (Special Education)

Sheila O'Shea Melli (Nursing Education)

Laura Menikoff (Reading Specialist)

Stephen Morgenstern (Special Education)

Jose Eduardo Nanin (Health Education)

Araxi Pasagian-Macaulay (Health Education)

Barbara A. Principe (Reading Specialist)

Russell Rosen (Special Education and ASL as a Foreign Language) Merrill Simpson (Nutrition) Virginia S. Stolarski (Special Education) Janet Twyman (Special Education)

Research Assistant Professor:

Tiina K. Urv (Special Educa-

Randi Wolf (Nutrition)

Instructors:

Jane Bogart (Health Education) Kathy Boisvert (Special Education) Candice Chaleff (Special

Education)

Christina Costa (Nutrition) Michelle Gennaoui (Special Education)

Nektaria Glinou (Special Education)

Mary Anne Gray (Reading Specialist)

Lesley L. Green (Health Education)

Leah Greenberg (Special Education)

Kathryn Hamilton (Nutrition) Maria Hartman (Special

Education)
Jeffrey Jacob (Health

Education)
Mara Manson (Nutrition)

Shelley Mesznik (Nutrition)

Theresa Murphy (Nutrition) Katherine Roberts (Health

Katherine Roberts (Health Education)

Mary Ellen Rooney (Special Education)

James Rose (Nutrition) Nadine Rothman (Special Education)

Patricia Rothschild (Special Education)

Michelle Saunders (Special Education)

Judy Strauss-Schwartz (Special Education)

Ioanna Tsiouri (Special Education)

Margaret Whelley (School Psychology)

Ruth Zealand (Special Education)

For information about faculty and their scholarly and research interests, please refer to the "Faculty" section of the Catalog.

Departmental mission:

Programs in this Department share the common goal of helping people to realize their full potential as learners, to make informed decisions, and to attain the best possible quality of life. Health and learning are inextricably linked. Optimal learning cannot take place in an atmosphere permeated with physical, psychological, and social health problems, and optimal health cannot be achieved without skill in learning and literacy.

One way to enhance learning potential is by overcoming health-related constraints and barriers to literacy through work at both the individual and community levels. Some programs prepare professionals to work with individuals and draw on and contribute to the behavioral sciences and education. Others emphasize the development and assessment of innovative, multidisciplinary, community-based interventions.

The programs in the Department fall into the following categories:

Applied Educational Psychology

The fields of study included in this program are: Reading Specialist, Reading and Learning Disabilities, and School Psychology. Such study prepares students to serve as educators, scientists, and service providers in a variety of settings, including universities, schools, psychoeducational clinics, hospital-based child study clinics, and community agencies.

Health Studies

The health studies program includes: Health Education, Nursing Education, and Nutri-

tion (Applied Physiology and Nutrition, Community Nutrition Education, Dietetic Internship, Nutrition and Public Health, Nutrition Education). These programs prepare students to serve in leadership roles in community-based organizations, government agencies, corporations, health care settings, and schools. Current knowledge in behavioral science and education is integrated with field-based applications for health promotion and disease prevention.

Special Education

Among the programs included in Special Education are: Administration and Supervision of Special Education Programs, Applied Behavior Analysis, Blindness and Visual Impairment, Deaf and Hard of Hearing, Guidance and Habilitation, Instructional Practice, Mental Retardation, Physical Disabilities, Research and Supervision of Special Education programs.

These programs prepare students to serve as leaders and scholar-practitioners skilled in the development, evaluation and application of practices that improve the life prospects of people with disabilities.

The Teaching of American Sign Language (ASL) as a Foreign Language

Teaching American Sign Language (ASL) as a Foreign Language prepares students to serve as scholar-practitioners who are skilled, knowledgeable and practiced in the development, evaluation and implementation of pedagogy that will instruct and educate individuals unfamiliar with ASL, the deaf community, and the culture of individuals who are deaf or hard of hearing.

Typically, the population that these scholar-practitioners will eventually instruct and educate are individuals who themselves have hearing, are in regular education programs, and possess a wide range of cognitive, social, and academic abilities and cultural backgrounds.

The Department faculty offers a broad spectrum of expertise. We encourage multidisciplinary efforts within the faculty and hope that, in the course of their studies, students will acquire the valuable skill of working collaboratively with experts in other disciplines.

Applied Educational Psychology

Clinical Neuropsychology Reading Specialist Reading and Learning Disabilities School Psychology

Clinical Neuropsychology

(Code: TZK)

Degree Offered:
Certificate of Attendance

Special Application Requirements/Information: Applicants must be qualified professionals who hold the doctoral degree. Applicants for clinical neuropsychology have to be licensed or eligible for licensure.

This program will not admit students for the 2002–2003 academic year.

Courses:

HBSK 4904. Research-independent study in neurosciences and education (1–3)
Faculty. Permission required.

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.

HBSK 5033 Human clinical neuropsychology (3) Faculty. Permission required. Prerequisite: HBSK 4075 or equivalent. Cognitive and emotional disorders associated with particular

brain functions or locations.

HBSK 5070. Neural bases for language and cognitive development Section 1 (3) Section 2 (3) Professor Kirk. Permission required. Examination of neural mechanisms involved in language, reading, and the acquisition of academic skills. Particular attention to language disorders, variations in cerebral organization, and hemisphere specialization.

HBSK 5072. Developmental neuropsychology (3) Faculty. Permission required. Prerequisite: HBSK 4075 or HBSK 5070 or HBSK 5068 or equivalent background in basic neurosciences; also recommended: an introductory course in developmental psychology. Focus on neurobiological processes underlying pre- and post-natal development of the central nervous system. Particular attention is devoted to processes related to early perceptual-motor and cognitive development and to educational and clinical problems in development.

HBSK 5139. Fundamentals of psychopharmacology (3)
Faculty. Permission required.
Mechanisms of action and behavioral effects of drugs on the central nervous system. Focus on drugs influencing learning and memory and those used for psychiatric and neurobiological conditions.

HBSK 6383. Neuropsychological assessment of children and adults (3)

Faculty. Permission required. Prerequisites: HBSK 5033 or HBSK 5070; and HBSK 5320. Analysis, administration, and interpretation of special procedures used to assess brain damage/dysfunction in adults and children. Special fee: \$150.

HBSK 5375. Fieldwork in reading and cognitive development from a neuropsychological perspective (4)

Faculty. Permission required. Prerequisite: previous courses in neuropsychological and educational assessment. Interpretation and implications of neuropsychological assessment for effective educational interventions. Materials fee: \$100.

HBSK 5575. Integrative seminar in neurosciences and education (3)

Faculty. Primarily for students in the Neurosciences and Education program during preparation of the final Ed.M. project; others by permission. In-depth examination of the implications for education and clinical practice of defined areas within the neurosciences.

HBSK 5905. Research-independent study in neurosciences and education (1–3)

Faculty. Permission required.

Advanced Study

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

HBSK 9410. Supervised internship, advanced study level (1–6) Professor Kirk. Internship for Advanced Study program students in Clinical Neuropsychology or in Neurosciences and Education. Supervised experience with assess-

ment and intervention techniques in the neurosciences as they apply to education and clinical practice.

HBSK 9910. Independent study, advanced study level (2–3) Independent study vehicle for students in Advanced Study program to engage in supervised research or independent readings in neurosciences and education or clinical neuropsychology.

Reading Specialist

(Code: TKU) Program Coordinator: Professor Dolores Perin For program information, call 212-678-3942 or e-mail dp111@columbia.edu.

Degree Offered: Master of Arts (M.A.)

Special Application Requirements/Information:

Successful completion of the program leads to eligibility for New York State certification as a Reading Teacher (those who do not have a New York State teaching license are required to take the standardized tests mandated by New York State before applying for certification). A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

Program Description:

The Reading Specialist M.A. program provides students with a broad foundation in applied educational psychology as it relates to literacy acquisition, and concentrated preparation in the assessment and remediation of reading and writing difficulties. The program provides experience in working with child, adolescent, and adult learners.

Graduates of the program:

- Understand the normal acquisition of literacy skills.
- Understand the cognitive processing problems experienced by students with reading, writing, and other learning disabilities.
- Understand literacy processes in terms of linguistic, ethnic, and cultural diversity.
- Understand the affective components of literacy difficulty.
- Can identify cognitive processing problems that underlie reading decoding, reading comprehension, and writing difficulties.
- Are able to assess reading, writing, and related skills.
- Can formulate and deliver an appropriate intervention plan.
- Can evaluate the effectiveness of remedial interventions and revise techniques and strategies when necessary.
- Can evaluate commercially prepared instructional and testing materials analytically and critically.
- Are able to interact with families to promote reading and writing habits in children.
- Are able to work collaboratively with other professionals and institutions.

Prepared to serve children and adults with a wide variety of educational needs, the program's graduates are in great demand as reading specialists in schools, community agencies, learning clinics, and private practice.

Degree Requirements:

The Master of Arts consists of approximately 34 points, and can be pursued either part-time or full-time. A completion of a Master's Integrative Project is required for graduation.

Required Courses (10 required courses, total 28–30 points):

• HUDM 4050 Introduction to measurement (2–3)

- HBSK 4072 Theory and techniques of assessment and intervention in reading (3)
- HBSK 5373 Practicum in literacy assessment & intervention Section 1 (HBSK 4072 prerequisite or corequisite, permission required) (3)
- HBSK 5376 Practicum in literacy assessment & intervention Section 2 (HBSK 4072 and HBSK 5373 prerequisite or corequisite, permission required) (3)
- HBSK 5377 Practicum in literacy assessment & intervention Section 3 (HBSK 5376 prerequisite) (3)
- HBSK 5098 Diagnosis of reading and writing disabilities (HBSK 4072 and HUDM 4050 prerequisite, permission required) (3)
- HBSK 4074 Reading comprehension strategies and study skills (3)
- HUDK 5090 Psychology of language and reading (2–3)
- HBSK 4085 Behavioral management in the classroom (child focus) (3) or
- HBSK 4077 Adult basic literacy (adult focus) (3)
- HBSK 5580 Seminar in consultation and evaluation in reading (to be taken during the final Spring of the program) (3)

With advisor's approval, one of the following may be substituted for HBSK 5580:

- HBSK 5272 Supervised field placement in reading (permission required) (1–3)
- HBSK 4903 Research-Independent study, reading (permission required) (3)

Elective Courses (2 or 3 courses, total 6 points): See Program Advisory Statement and Frequently Asked Questions, available from Program Secretary.

Course grades

If courses are graded, students should take them for a grade, rather than pass/fail.

Completion of M.A. Project
The Master's integrative project can address a number of areas related to reading and related learning difficulties among children and adults.
This culminating project is conducted under the supervision of an advisor.

Courses:

See courses in Reading Specialist, Reading and Learning Disabilities, and School Psychology programs below.

Reading and Learning Disabilities

(Code: TZB)

Program Coordinators: Professor Kim Reid and Professor Dolores Perin

Degree Offered: Master of Education (Ed.M.)

Special Application Requirements/Information:

Applicants must hold a graduate M.A. degree in Learning Disabilities or Reading Specialist from either Teachers College or another accredited institution. Admission decisions are based upon undergraduate and graduate academic records (a GPA of B+ or better is required), letters of recommendation, and a personal statement. Applicants must also have at least three years of fulltime teaching experience either at the time of admission, or before the granting of the degree.

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

Program Description:

The Reading and Learning Disabilities Ed.M. requires a minimum of 60 points, and is offered to applicants who have either teacher certification or a master's degree in a related area and who desire additional specialized training, without making the extended commitment required to undertake a doctoral degree. Graduates are eligible for state certification as a reading teacher and as a teacher of special education.

Applicants who have neither a master's degree nor teaching certification in either Reading Specialist or Learning Disabilities should apply to the Master of Arts degree in one of these two areas. Subsequent to completing this Master of Arts degree, persons are eligible to apply for admission to the Ed.M. program in Reading and Learning Disabilities.

Degree Requirements:

A total of at least 25 points must be taken to fulfill the reading and learning disabilities core requirement. Courses marked with an * are required courses. Other courses necessary to fulfill this core should be selected in consultation with an advisor. An integrative paper, which is submitted to fulfill the master's special project requirement, is prepared during the semester in which HBSK5580 is taken (usually the last spring semester of attendance).

Reading and Learning Disabilities Core

- C&T 4000 Introduction to special education (2–3)
- C&T 4050* Introduction to learning disabilities (2–3)
- C&T 4051* Education of students with learning disabilities (2–3)
- C&T 4052* Diagnosis and remediation of math learning problems (2–3)

- HBSK 4072* Theory and techniques of assessment and intervention in reading (3)
- HBSK 4074 Reading comprehension strategies and study skills (3)
- HBSK 4077 Adult basic literacy (3)
- C&T 4136 Methods and materials for reading instruction (2–3)
- C&T 4138 Teaching reading: a whole language perspective (2–3)
- C&T 4705* Observation and student teaching: learning disabilities (3)
- C&T 4853 Multisensory teaching of basic language skills (3)
- HUDK 5090 Psychology of language and reading (2–3)
- HBSK 5098 Diagnosis of reading and writing disabilities (3)
- HBSK 5099 Theories of cognitive processes in writing (3)
- HBSK 5373 Practicum in literacy assessment and intervention I
- HBSK 5376* Practicum in literacy assessment & intervention II (3)
- HBSK 5377 Practicum in literacy assessment & intervention III (3)
- HBSK 5580* Seminar in consultation and evaluation in reading (3)
- C&T 4501* Core course: teacher education lecture (0–2)
- C&T 4504* Child abuse and drug abuse detection and reporting (0)

Learning and Development Core A total of at least 9 are needed to fulfill this core requirement.

- HUDK 4020 Theories of human development (2–3)
- HUDK 4022 Developmental psychology: childhood (2–3)
- HUDK 4023 Developmental psychology: adolescence (2–3)
- HUDK 4027 Development of mathematical thinking (3)

- HUDK 4029 Theories of human cognition and learning (2–3)
- HBSK 4076 Introduction to neuropsychology (3)
- C&T 4079 Language development and habitation: the foundations (2–3)
- HUDK 4121 Developmental psychopathology (2–3)
- HBSK 5070 Neural bases for language and cognitive development (3)

Testing and Measurement Core
A total of at least 13 are needed to fulfill this core requirement.

- C&T 4004* School change (2–3)
- HUDM 4050* Introduction to measurement (2–3)
- C&T 4301* Practicum in the educational assessment of exceptional children (3)

Courses:

See courses in Reading Specialist, Reading and Learning Disabilities, and School Psychology programs listed below.

School Psychology

(Code: TKL-Ed.M.) (Code: TKT-Ed.D.)

Program Coordinator: Professor

Stephen Peverly

Degrees Offered:

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

Special Application Instructions/Information:

The GRE general test and an academic writing sample (a paper for a prior undergraduate or graduate class) are required for applicants to both the Ed.M. and Ed.D. degrees.

Any student wishing to focus on Low Incidence/Handicaps/ Hearing Impaired or Neuropsychology should indicate this on the application form under "Area of Specialization."

Program Description:

Our program involves the application of cognitive and developmental psychology to the promotion of competence in learning and mental health in schools and other educational contexts. Course work provides students with a strong foundation in the theory and research of cognitive and developmental psychology and its application to (a) the instruction and learning of school related subjects, particularly reading, and (b) the understanding and treatment of mental health problems. Practica and internship experiences provide students with the opportunity to apply this knowledge directly to their work with clients.

Clients are seen in a variety of contexts, including our collaborating schools (we provide school psychological services to children and youth in 3 schools that serve children from racially, ethnically, and linguistically diverse low and middle income environments). Faculty research, all of which is cognitively and/or developmentally oriented, provides yet another vehicle for students (doctoral primarily) to develop and apply their knowledge.

The overall goal of the program is to educate school psychologists who can promote the cognitive, behavioral, and social growth and development of children and families from diverse linguistic, cultural or racial backgrounds, through the ability to:

 Assess and diagnose learning, behavior, and emotional problems and strengths, from early childhood through middle adulthood, with an emphasis on school-age children and youth.

- Generate recommendations that are developmentally appropriate, remediate deficits effectively, and promote competence.
- Supervise other professionalsin-training in psycho-educational assessment and educational interventions with clients;
- Implement and evaluate theoretically and empirically sound educational and mental health intervention programs for school personnel, families and children. Examples include cognitive-behavioral individual and group interventions for coping with anxiety-related problems and for developing study skills, social skills, and early reading skills;
- Implement and evaluate behavioral consultation with school personnel and parents about children's instruction and learning, mental health and behavior. Examples include consultation about maximizing the learning and appropriate behavior of children with attention, learning, conduct and social skill deficits.
- In addition, doctoral graduates will be able to conduct psychological research related to children's cognitive and social-emotional functioning and take leadership roles in a broad range of settings such as schools, universities, psychoeducational clinics, and community agencies.

Degree Requirements:

Master of Education

The Master of Education program requires approximately 66 points of course work. The course of study stresses a firm grounding in the core areas of psychology, especially cognitive psychology, as well as in the tools traditionally used by school psychologists to apply their knowledge and skills to

school settings. Completion of the Ed.M. program in School Psychology can lead to certification as a school psychologist in New York State.

Ed.M. students should plan on three years of full-time attendance, including summers. Although part-time attendance is possible, full-time attendance leads to a richer educational experience. Ed.M. students must be available to spend a minimum of one full day per week for practica in their first year and two full days per week for fieldwork in their second year. Internships are full-time.

Suggested Sequence of Courses by Year and Semester:

First Year:

Fall

- HBSK 4025 Professional and ethical issues in school psychology
- HBSK 4072 Theory and techniques of reading assessment and intervention
- HBSK 5320 Individual psychological testing
- HBSK 5373 Practicum in literacy assessment and intervention Section 1
- HBSK 5031 Family as a context for child development

Spring

- HBSK 4073 Psychoeducational assessment and interventions
- HUDK 5023 Cognitive development
- HBSK 5321 Individual psychological testing
- HBSK 6380 Practicum in psychoeducational assessment with culturally diverse students

Summer

- HUDM 4122 Probability and statistical inference
- ORL 5362 Group dynamics: A systems perspective

Second Year:

Fall

- HBSK 5070 Neural bases for language and cognitive development
- HBSK 5085* Observing and assessing preschool children or
- HBSK 4074 Development of reading comprehension strategies and study skills
- HBSK 5280 Fieldwork
- HBSK 6382 Advanced practicum in psychoeducational interventions in schools
- HUDF 4029 Sociology of schools (HUDF 4021 and 4027 are acceptable alternatives.)

Spring

- HBSK 6383 Neuropsychological assessment of children and adults
- HBSK 5096 The psychology of memory
- HBSK 5280 Fieldwork
- CCPJ 6362 Group practicum Section 2
- HBSS 6100 Measurement and program evaluation

Third Year:

• HBSK 6480 School psychology internship (full-time placement)

*Take HBSK 5085 if you are interested in working with young children; take HBSK 4074 if you are interested in late elementary/middle school and high school populations.

Doctor of Education

Our American Psychological Association approved (next site visit in 2008) doctoral program (Ed.D.) requires approximately 95 points. Attainment of the doctoral degree prepares students for certification as a school psychologist and licensure as a psychologist. On average, doctoral students should plan on five years of full-time attendance, including summers. This includes three years

of course work, a two-semester externship in the third year, a full-year internship during the fifth year, and a dissertation.

Suggested Sequence of Courses by Year and Semester

First Year:

Fall

- HBSK 4025 Professional and ethical functions of school psychologists
- HBSK 5320 Individual psychological testing
- HUDM 4122 Probability and statistical inference
- HBSK 4072 Theory and techniques of reading assessment and intervention
- HBSK 5373 Practicum in literacy assessment & intervention Section 1
- HBSK 6570-HBSK 6578 Research in applied educational psychology

Spring

- HBSK 5321 Individual psychological testing
- HBSK 4073 Psychoeducational assessment and interventions
- HUDK 5023 Cognitive development
- HBSK 6380 Practicum in psychoeducational assessment with culturally diverse students
- HBSK 6570-HBSK6578 Research in applied educational psychology

Summer

- HUDM 5059 Psychological measurement
- HUDM 5122 Applied regression analysis

Second Year:

Fall

- HBSK 5085 Observing and assessing preschool children
- HBSK 5070 Neural bases for language and cognitive development
- HBSK 5280 Fieldwork

- HBSK 6382 Advanced practicum in psychoeducational interventions in schools
- ORL 5362 Group dynamics: A systems perspective
- HBSK 6570-HBSK6578
 Research in applied educational psychology

Spring

- HBSK 6383 Neuropsychological assessment of children and adults
- HUDM 5123 Linear models and experimental design
- HBSK 5280 Fieldwork
- CCPJ 6362 Group practicum Section 2
- HBSK 6570-HBSK6578 Research in applied educational psychology

Summer

CCPX 6020 History and systems of psychology

Third Year:

Fall

- HUDF 4029 Sociology of schools (HUDF 4021 and 4027 are acceptable alternatives.)
- HBSK 4074 Development of reading comprehension strategies and study skills
- HBSK 5031 Family as a context for child development
- HBSK 5271 Supervised externship in psychoeducational practice Section 1
- HBSK 6570-HBSK 6578 Research in applied educational psychology

Spring

- HBSK 5096 Psychology of memory
- HBSK 5271 Supervised externship in psychoeducational practice Section 1
- ORLJ 5040 Research methods in social psychology
- HBSK 5273 Supervised experience in supervision
- HBSK 6570-HBSK 6578 Research in applied educational psychology

Fourth Year:

- HBSK 8900 Dissertation advisement
- HUDM 6122 Multivariate analysis I/elective (in consultation with advisor)

Fifth Year:

HBSK 6480 School psychologist internship

Foci in School Psychology

As mentioned previously, master's and doctoral students in the School Psychology Program can choose, if they wish, to focus on one of two areas: Deaf and Hard of Hearing or Neuropsychology. Each of these options is detailed below.

Deaf and Hard of Hearing
The focus in Deaf and Hard of
Hearing requires a core of 9
courses (20 credits) plus appropriately planned fieldwork and
internship experiences. One of
these courses will meet the program's special education
requirement. Students are
expected to become proficient
in communicating by sign at
an intermediate level before the
completion of the program.

Required courses:

- BBSQ 4042 Audiology
- HBSE 4079 Language development and habituation: the foundation
- HBSE 6070 The psychology of deafness
- HBSE 4072 Development of language for individuals who are deaf or hard of hearing
- HBSE 5907 Linguistics of ASL
- HBSE 4071 Language, reading and writing instruction in the content areas for individuals who are deaf or hard of hearing
- HBSE 4070 Psychosocial and cultural aspects of deafness
- HBSE 4871 American Sign Language Section 1
- HBSE 4872 American Sign Language Section 2

There are many opportunities for fieldwork and internship experiences in the New York City area including public and private schools (e.g., St. Mary's School for the Deaf; St. Joseph's School for the Deaf; and St. Francis School) and hospitals (e.g., Manhattan Eye and Ear Hospital).

Neuropsychology

The focus in Neuropsychology consists of 5 required courses. Two courses focus on children and one meets the APA General Psychology Requirement for biological bases. Another course focuses on the consequences of brain damage in adults. These three courses provide students with an understanding of the differences between the developing brain and the adult brain, as well as the differences involved in the consequences of brain damage for the acquisition of skill and for the loss of an acquired skill.

A fourth course focuses on neuropsychological assessment for children and adults. The fifth course is completed by working two days in an external placement. Additional courses can be taken as electives in consultation with an advisor (e.g., BBS 5069, Brain and behavior Section 1, 2; HBSK 5139 Fundamentals of psychopharmacology; BBSN 5072 Developmental neuropsychology)

Required Courses:

- BBSN 5070 Neural bases of language and cognitive development (Sections 1 and 2 are required)
- Two courses focus on children and one meets the APA general psychology requirement for biological bases.
- BBSN 5033 Human clinical neuropsychology
- This course focuses on the consequence of brain damage in adults.

DEPARTMENT OF HEALTH AND BEHAVIOR STUDIES

- HBSK 6383 Neuropsychological assessment of children and adults
- HBSK 5274 Externship in neuropsychology

Courses:

HBSK 4025. Professional and ethical functions of school psychologists (3)

Professor Peverly. Permission required. Overview of issues associated with the school psychologist's roles within educational settings including assessment, intervention, and consultation functions. Education law and ethics are stressed.

HBSK 4072. Theory and techniques of reading assessment and intervention (3)
Professor Perin and others.
Overview of theories, assessment, and intervention techniques for reading and writing. Both normal development and literacy difficulty are addressed. Materials fee: \$50.

HBSK 4073. Psychoeducational assessment and interventions (1–3)

Dr. Dillon. Psychoeducational assessment, diagnosis, and treatment of child and adolescent disorders. Materials fee: \$50.

HBSK 4074. Development of reading comprehension strategies and study skills (3) Professor Peverly. Reading and study skills: Practical procedures based on research findings appropriate for teachers, counselors, and others. Discussion focuses on students in the middle elementary grades through young adulthood.

HBSK 4077. Adult basic literacy

Professor Perin. Psychological and educational aspects of adult basic literacy for teachers, counselors, and others who work with adults who seek to improve their basic reading and writing skills.

HBSK 4085. Behavioral management in the classroom (3) Dr. Sandburg. Behavioral analysis and management techniques applied to the classroom. Observation and recording of behaviors, behavior change, reinforcement schedules, shaping token economies, contingency management, and evaluation of behavior modification. Focus on applications but includes familiarization with research.

HBSK 4770. Observation and student teaching: elementary education (1–5)

Permission required. Student teaching under supervision, with emphasis on reading instruction.

HBSK 4903. Research-independent study in reading (1–3) Faculty. Permission required. Individualized research and fieldwork projects in literacy assessment and intervention.

HBSK 5031. Family as a context for child development (3)
Professor Brassard. Prerequisite: any introductory developmental psychology course. Examines theories of family functioning and empirical evidence of family processes that mediate child development outcomes. Emphasis on family factors associated with children's cognitive and academic development and social functioning within cultural contexts.

Materials fee: \$10.

HBSK 5070. Neural bases for language and cognitive development Section 1, 2 (3) Professor Kirk. Permission required. Examination of neural mechanisms involved in language, reading, and the acquisition of academic skills. Particular attention to language disorders, variations in cerebral organization, and hemisphere specialization.

HBSK 5085. Observing and assessing preschool children (3) Professor Boehm. Overview of assessment procedures used with preschool and kindergarten-age children including review of related tests, the development of observation procedures, and the development of screening programs. Materials fee: \$75.

HBSK 5096. The psychology of memory (3)

Professor Peverly. An analysis of perspectives on human memory with particular attention to knowledge, attention, strategic processes, metacognition, transfer, and context. The application of this information to practice is stressed.

HBSK 5098. Diagnosis of reading and writing disabilities (3) Professor Perin. Prerequisites HBSK 4072 and HUDM 4050. Presents theories and practices of diagnosing dyslexia, and other disorders of literacy. Students learn to administer, score and interpret a test battery, and formulate a diagnosis. Materials fee: \$50. Permission required.

HBSK 5099. Theories of cognitive processes in writing (3) Professor Perin. An examination of theoretical underpinnings of writing processes from vantage points of educational and cognitive psychology. Topics include the acquisition of writing abilities across the life-span, reading-writing relationships, and methods of assessing writing samples. Prerequisite: at least one course in reading, writing or spoken language.

HBSK 5271-HBSK 5273. Supervised fieldwork in remedial reading and school difficulties Permission required.

- HBSK 5271 Dr. Dillon. Supervised externship in psychoeducational practice (1–3) Supervisory fee: \$100.
- HBSK 5272 Professor Perin. Supervised field placement in reading (1–3)
- HBSK 5273 Professor Brassard. Supervised experience in supervision (1–3)

HBSK 5280. Fieldwork in school psychological services (1–3)

Dr. Gotterbarn. Permission required. Limited to second-year students in School Psychology. Must be taken concurrently with HBSK 6382-HBSK 6383. Supervised school-based experience in psychoeducational practice (two days per week for the entire academic year). Includes university-based supervision. Supervisory fee: \$100 per semester.

HBSK 5320-HBSK 5321. Individual psychological testing (3) Dr. Whelley and Professor Brassard. Permission Required. Prerequisite or corequisite: HUDM 4050 or equivalent. This is a year-long course open to Ed.M. and doctoral students in School Psychology and to doctoral students in Counseling and Clinical Psychology. Background, administration, and interpretation of major psychological tests from both nomothetic and ideographic perspectives. Both courses cover the administration of major cognitive and personality measures and the interpretation and integration of data into case reports. Lecture plus lab/supervisory section. Supervisory fee: \$100; materials fee: \$50 per term.

- HBSK 5320 Individual psychological testing I (3)
- HBSK 5321 Individual psychological testing II (1–3)

HBSK 5373 Practicum in literacy assessment and intervention Section 1 (3)

Faculty. Prerequisite or corequisite: HBSK 4072. Materials fee: \$50.

HBSK 5376. Practicum in literacy assessment & intervention Section 2 (3)

Faculty. Prerequisite or corequisite: HBSK 4072, HBSK 5373. Materials fee: \$50.

HBSK 5377. Practicum in literacy assessment & intervention Section 3 (3)

Faculty. Prerequisite: HBSK 5376. Materials fee: \$50.

HBSK 5579. Special topics in psychoeducational practice (1–3)

Faculty. Permission required. New and emerging developments and practices are examined and evaluated. Topics are announced in the preliminary and final course schedules distributed each semester.

HBSK 5580. Seminar in consultation and evaluation in reading (2–3)

Professor Perin. Permission required. Current topics in reading and schooling; professional issues; evaluation of school literacy curricula; preparation for integrative paper requirement.

HBSK 6320. Practicum in college instruction (1–3)
Faculty. Permission required.
Supervised experience in preparation of instructional materials and in assessment of student performance at the college and university level.

HBSK 6380. Practicum in psychoeducational assessment with culturally diverse students (2-3) Professor Brassard. Permission required. Supervised experience in psychoeducational assessment, including observation, interviewing, and testing of children from culturally diverse backgrounds; integration and interpretation of data. Consideration of intervention procedures. Students work with clients in the Center for Psychological Services. Additional supervisory session required. Supervisory fee: \$100. Materials fee: \$50.

HBSK 6382. Advanced practicum in psychoeducational interventions in schools (3) Dr. Dillon. Permission required. Concurrent registration in HBSK 5280 (Fieldwork) required for all School Psychology students. Cognitive-behavioral interventions with children, adolescents, and their families. Special fee: \$150.

HBSK 6383. Neuropsychological assessment of children and adults (3)

Professor Kirk. Permission required. Prerequisites: BBSN 5033 or BBSN 5070; and HBSK 5320. Analysis, administration, and interpretation of special procedures used to assess brain damage/dysfunction in adults and children. Special fee: \$150.

HBSK 6480. School psychologist internship (0–4)

Dr. Dillon. Permission required. Limited to Ed.M. or doctoral students in school psychology. Supervised experience in the delivery of psychological services in approved and appropriate agencies, institutions, and schools.

HBSK 6522. Seminar in cognitive processes (3)

Professor Peverly. Permission required. Advanced discussion of topics in cognitive psychology and their implications for instruction.

HBSK 6570-HBSK 6578. Research in applied educational psychology

Permission required. Prerequisite: familiarity with statistical procedures and research design. Students participate in ongoing research or other special projects under the direction of a faculty member.

- HBSK 6570 Neurosciences and education (0–3) Professor Kirk.
- HBSK 6571 Cognitive processes and strategies in young children (0–3) Professor Boehm.
- HBSK 6572 Mathematics reasoning and mathematics education (0–3) Professor Ginsburg.
- HBSK 6573 Text comprehension (0–3)
 Professor Williams.
- HBSK 6574 Cognitive processes related to studying (0-3)

Professor Peverly.

• HBSK 6576 Acquisition of reading and writing ability (0–3)

Professor Perin.

• HBSK 6577 Psychoeducational aspects of deafness (0–3)

Professor Kretschmer.

• HBSK 6578 Research: Family and school violence (0–3) Professor Brassard.

HBSK 6584. Seminar in school psychology consultation (1–5) Professor Peverly. Advanced seminar in school consultation and classroom management.

HBSK 6903. Research-independent study in reading (1–3) Faculty. Advanced students work with professor on research projects related to literacy skills across the lifespan.

HBSK 7503. Dissertation seminar: Schooling and Reading (1–3)

Faculty. Permission required.

HBSK 8902. Dissertation advisement: Schooling and Reading (0) Faculty. Permission required.

Health Studies

Health Education Nursing Education Nutrition

> Applied Physiology and Nutrition Community Nutrition Education

Dietetic Internship Program Nutrition and Public Health Nutrition Education Physical Education

Health Education

(Code: TSD)

Program Coordinator: Professor Charles E. Basch

Degrees Offered:
Master of Arts (M.A.)
Master of Science (M.S.)
Doctor of Education (Ed.D.)

Program Description:

The Program in Health Education at Teachers College has had a long history in preparing health education specialists. Health education is a professional field that has expanded rapidly, primarily because of national policy that has emphasized health promotion and disease prevention. Its goal is to facilitate voluntary health-related behavioral and social change through the application of principles of behavioral and social sciences.

As such, health education is concerned with motivating and enabling individuals and groups to assume responsibility for their health by learning and adopting behaviors, and supporting social policies that can promote and maintain health.

The program at Teachers College is grounded in the belief that community-level structures and organizations play a key role in determining the health of the people. It offers courses in which students learn to analyze and understand, and thus become able to influence community structures that

either enhance or undercut health-promoting individual behaviors.

In addition to Health Education courses, students are encouraged to pursue interdisciplinary study and research throughout Teachers College, as well as other divisions of Columbia University such as the School of Public Health and the Graduate School of Arts and Sciences. The Center for Health Promotion at Teachers College, which involves students and faculty, provides opportunities to take part in ongoing research projects in health promotion and disease prevention.

Students also may participate in research being conducted in the Research Division at the Hospital for Special Surgery, the Department of Medicine at the Weill Medical College of Cornell University, or with the Diabetes Research and Training Center at the Albert Einstein College of Medicine. Both have multi-institutional collaborative efforts involving faculty from the Program in Health Education at Teachers College.

The program prepares graduates who will assume positions of leadership and service as professional health educators in a variety of practice, research, and policy-making settings. Graduates of the program take positions as leaders in health promotion and disease prevention programs of voluntary health agencies, hospitals and other health care organizations, school systems, business and industry, and health-related governmental agencies in the United States and in other countries. They also serve as educator-scholars in elementary and secondary schools, colleges and universities, and as health services researchers in academic medical centers.

DEPARTMENT OF HEALTH AND BEHAVIOR STUDIES

Each degree program has some flexibility in order to accommodate differences in previous professional preparation, interests, and professional career objectives of students. In general, the programs of study emphasize the development of competencies in assessing individual and community need for health education; planning effective health education programs; implementing health education programs; coordinating the provision of health education services; acting as a resource person in health education; communicating health and health educational needs, concerns, and resources; evaluating the effectiveness of health education programs; and conducting research in health education.

Students at both the master's and doctoral levels are encouraged to become actively involved in departmental, college, and university functions which facilitate interaction with faculty and other students, and which have the potential to enrich the student's intellectual and professional growth. They are expected to undertake the complex and challenging tasks associated with graduate study and other related learning experiences in such a manner as to demonstrate their intellectual discipline. Such discipline includes integrity, creativity, and innovation, as well as the student's abilities to conceptualize at a high level, think critically, communicate effectively both orally and in writing, and provide leadership.

Students also are expected to demonstrate the ability to appreciate, relate to, and communicate with ethnically, racially, and linguistically diverse individuals and groups of people who possess different personal, social, and cultural histories than their own. They are also encouraged to develop

a strong sense of professional identity and commitment to professional affairs in health education. This might take the form of active membership in appropriate national, regional, or local professional organizations, participation in professional meetings, presenting an abstract or a paper at professional meeting, or serving on a professional committee.

Completion of the M.A. degree program makes graduates eligible to qualify for certification as a Certified Health Education Specialist through the National Commission for Health Education Credentialing, Inc. and as a Certified Alcoholism Counselor. Specific information regarding each program and its degree requirements can be obtained by writing to the program coordinator, Professor Charles E. Basch.

Special Application Requirements/Information:
All programs have ongoing admissions, and will review applications throughout the year. Preference in scholarship awards will be for those students who meet the priority deadline. The GRE test is not required for applicants to the M.A., M.S., or Ed.D. programs.

Doctoral applicants are required to submit a writing sample (preferably a course paper, master's thesis, or published article).

Degree Requirements:

Master of Arts

The minimum College requirements for the Master of Arts degree in Health Education include satisfactory completion of a program of no less than 30 points of course work and a formal essay, or 32 points with an acceptable departmental integrative project. At least 20 points must be earned in

Teachers College courses. In order to broaden the student's background in education, no less than three Teachers College courses from outside the major department, each for a minimum of two points, must be taken. The remaining course work may be completed at Teachers College or in other graduate divisions of the University, but no more than 12 points from other faculties of the University will be credited toward the minimum point requirement. No transfer credit is granted for work completed at other institutions.

The program of study includes required and elective courses in several areas. The exact program and sequence of study are determined by the student's previous academic preparation, professional experience, and professional career objectives. Programs of study typically exceed the minimum College requirement of 32 points. Selection of courses that fulfill an area requirement in the program of study listed below is guided by individual needs of the student and is not limited to those courses that are listed. It should be noted that the point requirements indicated for each area of study given below are minimum requirements.

Major (21points) Required Core (12):

- HBSS 4100 Introduction to health education (3)
- HBSS 4102 Principles of epidemiology in health promotion (3)
- HBSS 4118 Relapse prevention for problem behaviors (3)
- HBSS 5110 Determinants of health behavior (3)

Elective Courses (9 points):

- HBSV 4000 A survey of nutrition: fads and popular fantasies (3)
- HBSV 4010 Nutrition and behavior (3)

- HBSV 4011 Women and weight (3)
- HBSV 4013 Nutritional ecology (3)
- HBSS 4110 Health promotion for children and adolescents (3)
- HBSS 4111 Addictions and dependencies (3)
- HBSS 4112 Social policy and prevention (3)
- HBSS 4113 Human sexuality education (3)
- HBSS 4114 Health promotion for multicultural populations (3)
- HBSS 4115 Health promotion for aging adults (3)
- HBSS 4116 Health education for elementary teachers (2–3)
- HBSS 4117 AIDS education (3)
- HBSS 4120 Topics in health education (2–3)
- HBSS 4121 Death education
- HBSS 4123 Violence Prevention (3)
- HBSS 4130 Alcohol and health (3)
- HBSS 4140 Developing workplace health promotion programs (3)
- HBSS 4141 Health and illness in cross-cultural perspective (3)
- HBSS 4901 Research and independent study in health education (1–4)
- HBSS 5111 Planning health education programs (3)
- HBSS 5112 Theory and practice of health communications (3)
- HBSS 5113 Community health analysis (3)
- HBSS 5115 Assessment and counseling for health promotion (3)
- HBSS 5408 Practicum in individual health advisement (3)
- HBSS 5410 Practicum in health education (1–6)
- HBSS 6100 Measurement and program evaluation (3)
- HBSS 6145 Health psychology (3)

Essay or Integrative Project (0 points):

Broad and Basic Areas of Professional Scholarship and Practice (6–9 Points)

- One course in learning theory pertaining to a population group of interest, such as the child, adolescent, adult, or older adult.
- One course in communications, computing or instructional technology and media.
- One course in research methods, evaluation, measurement, or statistics.

Master of Science

The Master of Science degree requires a minimum of no fewer than 60 points and an essay or project. The College requires that a minimum of 30 points be completed under the auspices of Teachers College, including 18 points that must be earned in Teachers College courses. In order to broaden the student's background in education, no less than three Teachers College courses from outside the major department, each for a minimum of two points, must be taken. The remaining course work may be completed at Teachers College or in other graduate divisions of the University.

Although no transfer credit toward the Master of Science is granted for work completed at other institutions, a maximum of 30 semester hours of graduate credit may be used from other recognized institutions to reduce the degree requirement. Applicants who have completed the Master of Arts (M.A.) degree in Health Education through Teachers College, which is applicable to the M.S. degree, must offer a minimum of 45 points of the required 60 points under Teachers College registration.

The program of study for the Master of Science degree in Health Education includes required and elective courses in several areas. The exact program and sequence of study is determined by the previous academic preparation, professional experience, and professional career objectives of the student. Selection of courses that fulfill an area requirement in the program of study listed below is guided by individual needs of the student and is not limited to those courses that are listed. It should be noted that the point requirements indicated for each area of study given below are minimum requirements.

Major (36 Points): Introductory Core Courses (9 points):

- HBSS 4100 Introduction to health education (3)
- HBSS 4102 Principles of epidemiology in health promotion (3)
- HBSS 4118 Relapse prevention for problem behaviors (3)

Advanced Core Courses (Required 15 points):

- HBSS 5110 Determinants of health behavior (3)
- HBSS 5111 Planning health education programs (3)
- HBSS 5112 Theory and practice of health communications (3)
- HBSS 6100 Measurement and program evaluation (3)
- HBSS 6145 Health psychology (3)
- Elective Courses (12 points) (See M.A. elective list for course selection)
- Essay or Integrative Project (0 points)

Broad and Basic Areas of Professional Scholarship and Practice (18 Points):

• Nature of Education, Persons, and Learning Processes (required 6 points)

- Communications, Computing and Instructional Technology and Media (required 2–3 points)
- Methods of Evaluation and Research (required 9 points)
- General Research Methods (required 3 points)
- Statistics (required 3 points)
- Measurement and Evaluation (Required 2–3 points)

Doctor of Education

The Doctor of Education degree requires a minimum of 90 post-baccalaureate points and the preparation and defense of a dissertation. Up to 45 graduate level points taken at other institutions may be transferred toward doctoral requirements. Candidates for the Ed.D. degree are also expected to demonstrate satisfactory performance on a departmental Certification Examination and to prepare and defend an acceptable dissertation project. In addition to the College requirements, all candidates for the Ed.D. degree in Health Education must have fulfilled the equivalent of the requirements for the Master of Arts (M.A.) degree in health education.

For those students entering the doctoral program with only a baccalaureate degree, the M.A. degree must be completed first. Those applicants who, at the time of admission to the program, do not present the equivalent of a master's thesis are required to prepare and present an acceptable essay or predoctoral project prior to or during the term in which 60 points of applicable graduate study have been completed.

The program of study for the Doctor of Education degree in Health Education includes required courses, course work in required areas, and elective courses. The exact program and sequence of study is deter-

mined by the previous academic preparation, professional experience, and professional career objectives of the student. Programs of study typically exceed the minimum College requirement of 90 points, with most candidates offering between 90–120 points for the degree. Selection of courses that fulfill an area requirement in the program of study listed below is guided by individual needs of the student and are not limited to those courses that are listed.

A student who presents evidence of proficiency in those required courses or in an area of course work required for the program may, at the discretion of the major advisor and upon approval of the department chairman, select and substitute courses that represent more advanced study in the area in which the student has demonstrated competence, or additional preparation in other areas in which the student's preparation is less extensive. It should be noted that the point requirements indicated for each area of study given below are minimum requirements.

Major (50 Points)
Introductory Core Courses
(Required 9 points):

- HBSS 4100 Introduction to health education (3)
- HBSS 4102 Principles of epidemiology in health promotion (3)
- HBSS 4118 Relapse prevention for problem behaviors (3)

Advanced Core Courses (Required 15 points):

- HBSS 5110 Determinants of health behavior (3)
- HBSS 5111 Planning health education programs (3)
- HBSS 5112 Theory and practice of health communications (3)
- HBSS 6100 Measurement and program evaluation (3)

• HBSS 6145 Health psychology (3)

Elective Courses (21 points): (See M.A. list for course selection)

Research Seminar and Preparation of the Dissertation (5 points):

- HBSS 6510 Research seminar in health education (3)
- HBSS 7501 Dissertation seminar in health education (2)
- HBSS 8900 Dissertation advisement in health education (0)

Broad and Basic Areas of Scholarship and Practice (27–30 Points):

- Nature of Education, Persons, and Learning Processes (required 6–9 points)
- Communications, Computing and Instructional Technology and Media (required 2–3 points)
- Methods of Evaluation and Research (required 17–18 points)
- General Research Methods (required 6 points)
- Statistics (required 6 points)
- Measurement and Evaluation (Required 5–6 points)

Courses:

Introductory Courses

HBSS 4100 Introduction to health education (3)
Professor Allegrante. Determinants of health; relationship between health and human behavior; the role of health education as a strategy in health promotion and disease prevention; selected issues and problems.

HBSS 4102 Principles of epidemiology in health promotion (3)

Professor Basch. Principles and methods of epidemiologic investigation; application of epidemiology to prevention and control of disease, using health education. HBSS 4110. Health promotion for children and adolescents (3)

Professor Basch. Basic topics in promoting child and adolescent health; relationships between school, family, and community in promoting the health status of school age children.

HBSS 4111. Addictions and dependencies (3)

Professor Wallace. Social-psychological, cultural, clinical, and pharmacological factors associated with the use of psychoactive drugs and other compulsive behaviors.

HBSS 4112. Social policy and prevention (3)

Professor Allegrante. Analysis of current national health policy, its social, economic, and political determinants, and implications for health education.

HBSS 4113. Human sexuality education (3)

Mr. Rocco. Explore human sexuality from a variety of perspectives; explore their own attitudes about human sexuality and how they affect them personally and professionally; examine methods of teaching and designing sexuality education programs.

HBSS 4114. Health promotion for multicultural populations (3)

Professor Wallace. Health status, needs, and problems of multicultural populations in urban environments, and sensitivity to these issues in effective programs

HBSS 4115. Health promotion for aging adults (3)

Dr. Fulmer. Changes in aspects of health during the middle and later years; recent developments in the field of gerontology as well as legislation and community organization designed to meet health needs of aging persons.

HBSS 4116. Health education for teachers (2–3)

Ms. Whalen. Review of concepts, issues, and content relevant for teaching children and adolescents; methods and resources for teaching various content are integrated throughout; topics include alcohol and drugs, sexuality, environmental health, diet, weight and weight control, stress, and child abuse.

HBSS 4117. AIDS education (2–3)

Dr. Fullilove. The role of schools, parents, and communities in educating youth about AIDS and human sexuality; review of methods and resource materials for providing such education; consideration of controversial issues surrounding these topics.

HBSS 4118. Relapse prevention for problem behaviors (3)

Professor Wallace. Theory and techniques of relapse prevention across a range of addictive behaviors. Topics include relapse prevention for psychoactive substance use, eating disorders, gambling, and sex.

HBSS 4120. Topics in health education (2–3)

Faculty. Review and synthesis of current knowledge on a selected topic related to health, such as teenage suicide, child abuse, violence, teenage pregnancy, and mental health.

HBSS 4121 Death education (3)

Dr. Demmer. Designed to increase awareness/insight of the multidimensional aspects of death, dying, and bereavement. Gain skills as health care professionals in dealing with death, its causes, treatment of life threatening illness, including AIDS, suicide, and violent death. Explore customs across cultures, afterlife beliefs, near-death experiences, and ethical issues.

HBSS 4122. Women's health (3) Dr. Whalen. Explore health issues as they relate to the female body and psyche including: body image, weight control, substance abuse, HIV, cancer, reproductive health, contraceptives, abortion, domestic violence, rape, sexual harassment, and lesbian health issues with attention paid to the media and women's health.

HBSS 4123. Violence Prevention

Professor Wallace. This course covers the nature and prevention of invisible and covert, as well as visible and overt violence, including intrapersonal, interpersonal, family, community, gang, school, societal and international manifestations.

HBSS 4130. Alcohol and health

Professor Wallace. Background and theory related to alcohol use and misuse; health and social consequences of alcohol misuse; consideration of special populations, such as children of alcoholics; review of alternative approaches to prevention and treatment.

HBSS 4140. Developing workplace health promotion programs (3)

Professor Allegrante. Provides a comprehensive step-by-step process to designing, implementing, and evaluating health promotion programs at the workplace.

HBSS 4141. Health and illness in cross-cultural perspective (3) Faculty. Examination of the role of healing and medicine, both historically and cross-culturally, and of the utility of considering cultural practices and beliefs when designing health education programs.

Intermediate and Advanced Courses

HBSS 5110. Determinants of health behavior (3)

Professor Allegrante. Theory-based analysis of the cultural, social-psychological, and social-structural determinants of health-related behaviors; implications for planned change at individual, small-group, and community levels.

HBSS 5111. Planning health education programs (3) Professor Basch. Process of developing social, epidemiological,

behavioral, and educational diagnoses; principles of planning, implementing, and evaluating health education interventions.

HBSS 5112. Social marketing and health communications (3) Ms. Bogart. Principles and theories of marketing and communication applied to health education. Practice in developing and evaluating health communications.

HBSS 5113. Community health analysis and intervention (3) Professor Basch. Survey and analysis of concepts, issues, strategies, and methods relevant to community health analysis and intervention.

HBSS 5115. Assessment and counseling for health promotion (3)

Professor Wallace. Assessment of clients' health compromising behaviors to reduce relapse and facilitate referrals to mental health staff; interventions for motivational counseling, psychoeducational group, and focus group formats are covered.

HBSS 5408. Practicum in individual health advisement (3) Faculty. Individual and small group practice in the application of basic principles of counseling in the area of health problems.

HBSS 5410. Practicum in health education (1–6)

Faculty. Permission required. Advance registration required in the semester prior to taking the course. Intensive field experience in a community setting. Essay required at end of field experience. Sections: (1) Professor Allegrante (2) Professor Basch (3) Professor Wallace.

HBSS 5710. Supervised teaching in health education (1–6) Faculty. Permission required. Advance registration required in the semester prior to taking the course. Supervised health teaching in a school. Essay required at end of teaching experience.

HBSS 6100. Measurement and program evaluation (3)

Professor Basch. Theory, methods, and problems of measurement and evaluation; standards for evaluation of health, education and related social programs; skills in critical evaluation of research and evaluation reports.

HBSS 6145. Health psychology

Faculty. Topics include social learning theory, attribution, and attitudes as they apply to health promotion, disease prevention, reactions to illness, and adherence to treatment regimens.

Seminars and Research

HBSS 4901. Research and independent study in health education (1–4)

Faculty. Permission required. Research and independent study under faculty direction. Proposals must have prior approval of a faculty member. Sections: (1) Professor Allegrante (2) Professor Basch (3) Professor Wallace.

HBSS 5510. Seminar in health education (3)

Faculty. Current problems, issues, and trends in health education.

HBS 5690. Colloquium in health promotion (2–3)

Faculty. Permission required. A multidisciplinary colloquium involving faculty and students from several departments, as well as guest lecturers from outside the College and University. Analysis of the content, theory, and method of health promotion programs in various settings. Faculty and students discuss current research, practice, and policies in health promotion.

HBSS 6510. Research seminar in health education (3)

Faculty. Permission required. Review of research literature, methods, and problems in health education.

HBSS 6901. Research and independent study in health education (1—4)

Faculty. Permission required.
Open to matriculated doctoral students. Research and independent study under faculty direction. Proposals must have prior approval of a faculty member. Sections: (1) Professor Allegrante (2) Professor Basch (3) Professor Wallace.

HBSS 7501. Dissertation seminar in health education (2) Faculty. Permission required. Open to certified doctoral candidates only. Development and presentation of doctoral dissertation proposals.

HBSS 8900. Dissertation advisement in health education (0) Faculty. Permission required. Individual advisement on doctoral dissertations. Fee: equal to 3 points at current tuition rate for each term. Sections: (1) Professor Allegrante (2) Professor Basch (3) Professor Wallace.

Nursing Education: (Nurse Educator/Patient Educator)

(Code: TNP) Program Coordinator: Kathleen A. O'Connell Program Office: 678-3120 e-mail: ko199@columbia.edu

Degree Offered:
Doctor of Education (Ed.D.)

Special Application Requirements/Information: In addition to the requirements for admission to Teachers College, an applicant for the Doctor of Education degree in Nursing must be a registered nurse in any U.S. state or in Canada and hold a baccalaureate degree and a master's degree. Applicants are required to take the Graduate Record Examination (GRE) and provide a writing sample (a course paper, master's thesis, or pub-

Program Description:

lished paper).

Teachers College was the first academic setting to educate nurses. Nursing education began at Teachers College in 1899. The Nursing Education Program has a long and distinguished tradition of commitment to the education of nurses who have diverse roles in academic and community settings in the United States and abroad. Current placement of the program within the Department of Health and Behavior Studies ensures education with an interdisciplinary approach to problems in nursing, health, and society.

- This program is designed for (1) nurse practitioners with master's degrees who want to take the lead in developing innovative interventions for improving health behavior outcomes in primary care
- (2) nurse educators with master's degrees who want to gain more expertise in all

- aspects of education, including gaining the research skills that all faculty of the 21st Century will be expected to have.
- (3) clinical specialists with master's degrees who want to improve their effectiveness in helping patients with chronic illness achieve maximal functioning.

The purpose of the this program is to give students who are registered nurses with master's degrees in nursing doctoral level education aimed at understanding and changing health behavior and at educating both clients and nursing students. It is well established that over 50% of mortality of U.S. citizens can be attributed to lifestyle. With the globalization of the market place, and of epidemics of infectious diseases, lifestyle and health behavior also significantly affect the health and wellbeing of much of the world's population. Graduates of this program will be prepared to design interventions and conduct research on health behavior, health education and health promotion. In addition, graduates of the program will be conversant with history, theory, and current trends in nursing so that they can use nursing knowledge and expertise to improve the health and well being of the citizens of the United States and of the global community. To insure that knowledge in nursing and in health behavior and health promotion is passed on to the next generation of nurses, graduates of this program will also be prepared to engage in educationally sound programs for nursing students and for clients. Graduates of the program will thus be able to take their place among distinguished nursing leaders who carry out cutting edge research and engage in innovative strategies for teaching students

of nursing and for teaching clients to modify their health behavior.

In order to build on previous work done by nurses and other investigators in the health behavior arena, students will attain a rich background in the study of nursing theory, nursing research, the history of nursing and professional issues affecting the nursing profession. In addition, students will gain expertise in managing health behavior change and in using research and statistical approaches. Study of methods and approaches to teaching clients and to teaching nursing students at undergraduate and graduate levels will be included as an integral part of the preparation of nurse scholars. Students also are expected to demonstrate the ability to appreciate, relate to, and communicate with ethnically, racially, and linguistically diverse individuals who possess different personal, social, and cultural histories than their own.

Degree Requirements:

The Doctor of Education program in Nursing Education requires a minimum of 90 points beyond the baccalaureate degree. Up to 38 graduate level points taken at another institution may be transferred toward doctoral requirements. For all students, the program includes course work in four areas: Nursing, Health Behavior, Research, and Education. In addition, students choose a functional emphasis area in research, education or another area consistent with the program and with advisor approval. Nine points in addition to those points required of all students must be taken in

the functional area. Points will be allotted as follows:

Nursing	42
Health and Behavior	12
Research	18
Education	6
Emphasis area	9
Elective	3
Total	90
Nursing Courses	
HBSN 4001 Contemporary	
issues in nursing	3

Nursing Courses	
HBSN 4001 Contemporar	y
issues in nursing	3
HBSN 4004 Historical	
trends in nursing	3
HBS 5551 Bioethics	3
HBSN 6505 Theory	
construction in nursing	3
HBSN 6500 Research	
grant writing for health	
and behavior studies	3
HBSN 6501 Seminar in	
professional nursing	3
HBSN 5908 Independent	
study in professional	
nursing	3
HBSN 6600 Colloquium	
in nursing theory	3
HBSN 6908 Independent	
study in professional	
nursing	1 - 3
HBSN 6909 Independent	
study in nursing	
theory	1-3
HBSN 6940 Independent	
study in nursing	
research	1-3

Health and Behavior Studies Courses

Courses	
HBSS 4102 Principles of	
epidemiology in	
health promotion	3
HBSV 4011 Weight,	
eating problems and	
body image	2
HBSS 4114 Health	
promotion for	
multicultural populations	3
HBSS 4115 Health	
promotion for	
aging adults	3
HBSS 4118 Relapse	
prevention for	
problem behaviors	3
HBSV 5013 Strategies for	
nutrition education	
and behavior change	3

HBSV 5015 Nutritional	
epidemiology	3
HBSS 5110 Determinants	
of health behavior	3
HBSS 5113 Community	
health analysis	
and intervention	3
HBSS 5115 Assessment	
and counseling for	
health promotion	3
HBSS 6145 Health	
psychology	3
HBSS 5112 Social	
marketing and health	
communications	3

Education

(Courses may also be selected from the courses focused on adult education in the Department of Organization and Leadership and appropriate education courses in other departments) HBSN 5530 Clinical teaching and evaluation 3 HBSN 5930 Independent study in nursing education 3 HBSN 6530 Seminar on curriculum in nursing education HBSN 6635 Colloquium in nursing education HBSN 6930 Independent study in nursing 0 - 3education

Research

HBSN 5040 Research	
methods in health and	
behavior studies	3
HBSN 6540 Dissertation	
design and development	
seminar	3
HBSN 7500 Dissertation	
seminar	3
HBSN 8900 Dissertation	
advisement	0

Additional statistics and research methods courses from Department of Human Development

Courses:

General Nursing Courses

Nursing domain courses deal with theory, professionalization, research, history, issues, and trends. These courses are open to students in any nursing sequence of study. They are also open to interested students, nurses, or non-nurses from other departments and include course work in nursing theory, professional nursing, and nursing research.

Nursing Theory

HBS 4003. Crisis intervention (3) Faculty. Study of general crisis phenomena within the framework of crisis intervention theory. Analysis of individual, family, and community dynamics.

HBSN 4005. Theories of nursing (3)

Faculty. Theoretical foundations of nursing. Critical analysis of theories that explain the nature of nursing practice.

HBSN 5000. Nursing science (3) Faculty. Prerequisite: HBSN 4005. Examination of emerging issues in nursing research and health care. Relevance to theory development and health policy are emphasized.

HBSN 5005. Interdisciplinary theory in nursing (3)
Professor O'Connell. Prerequisites:
HBSN 4005, HBSN 5040 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.

HBS 5551. Bioethics (3) Dr. Camuñas. Review of bioethical issues in society, health care, and health care delivery.

HBSN 6500, Research grant writing for health and behavior studies (3)

Professor O'Connell. Techniques of research grant preparation with emphasis on National Institutes of Health grants will be covered. Students will prepare an actual grant. In addition, funding agencies, the

budgeting process, building research teams, the review process, responding to reviewers, and resubmitting grants will be covered.

HBSN 6505. Theory construction in nursing (3)
Faculty. Prerequisites: HBSN 4005 and HBSN 5005. Acquisition of the fundamental logic of theory development and its application to nursing. Understanding and use of theory construction.

HBSN 6600. Colloquium in nursing theory (3)

Faculty. Prerequisites: 2 courses in nursing theory. Examination of a selected nursing theory or theory problem in depth. Course may be repeated for credit if different topics are covered.

HBSN 6909. Independent study in nursing theory (1–6) Faculty. Permission required. Individual, guided learning experience in a selected nursing theory or theory problem. Topic agreed upon between student and faculty.

Professional Nursing

HBSN 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.

HBSN 4004. Historical trends in nursing (3)

Faculty. Consideration of the history of nursing and nursing education, and its influence on current developments in nursing.

HBSN 5908. Independent study in professional nursing (1–6) Faculty. Permission required. Individual, guided learning experience at the master's level in a selected aspect of professional nursing. Topic agreed upon between student and faculty.

HBSN 6501. Seminar in professional nursing (3)

Faculty. Prerequisites: 2 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.

HBSN 6908. Independent study in professional nursing (1–6) Faculty. Permission required. Individual, guided learning experience at the doctoral level in a selected aspect of professional nursing. Topic agreed upon between student and faculty.

Nursing Research

HBSN 5040. Research methods in health and behavior studies

Faculty. Prerequisites: HBSN 4005, HBSN 5000. Analysis of hypothetical generation, study designs and data collection methods in nursing research with emphasis on application to practice.

HBSN 5043. Nursing research development (3)

Faculty. Prerequisites: HBSN 4005, HBSN 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.

HBSN 6540. Seminar on dissertation design development (3) Faculty. Permission required. Prerequisites: HBSN 5043, HBSN 4005, HBSN 5005, statistics, and certification. Required of all doctoral candidates. Group critique of dissertation proposals; focus on beginning to intermediate level aspects of analysis of theory and research design. This course may be repeated as often as necessary until the student is ready for the departmental examination. Once HBSN 6540 is taken, continuous Autumn/Spring enrollment in the course is required until the semester during which the departmental examination is held.

HBSN 6541. Advanced seminar on dissertation design development (3)

Faculty. Permission required. Prerequisite: HBSN 6540 and certification. Focus on advanced aspects of research design and method.

HBSN 7500. Dissertation seminar in nursing (3)

Faculty. Permission required. Prerequisite: HBSN 6540 and certification. The departmental examination, involving presentation of dissertation proposal for faculty approval. This course is required of all certified doctoral candidates and may be taken only once.

HBSN 8900. Dissertation advisement in nursing (0) Faculty. Individual advisement on doctoral dissertation following completion of all course work. Fee equal to 3 points at current tuition rate for each term. For continuous requirements, see catalog on continuous registration for Ed.D. degree.

HBSN 6940. Independent study in nursing research (1–6) Faculty. Permission required. Allows student to contract with individual faculty member for research related work in a defined area of study.

Nursing Education

HBSN 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.

HBSN 5930. Independent study in nursing education (1–6) Faculty. Permission required. Individual, guided learning experience at the master's level in a selected aspect of nursing education. Topic agreed upon between student and faculty.

HBSN 6530. Seminar on curriculum in nursing education (3) Faculty. Permission required. Open only to doctoral candidates. Intensive study of selected issues and/or designs in nursing curricula.

HBSN 6635. Colloquium in nursing education (3)
Faculty. Prerequisite: determined by instructor based on topic selected. Examination of selected problems in nursing education practice and administration.
Course may be repeated for credit if different topic covered.

HBSN 6930. Independent study in nursing education (1–6) Faculty. Permission required. Individual, guided learning experience at the doctoral level in a selected aspect of nursing education. Topic agreed upon between student and faculty.

Nutrition

Program Coordinators: Professor Isobel R. Contento
Professor Lawrence H. Kushi
Program Office: 678-3950 email: nutritiontc@columbia.edu
Website:
www.tc.columbia.edu/
~academic/nutri/

Nutrition Education

(Code: TSA)

Degrees Offered:

Master of Science (M.S.)

Doctor of Education (Ed.D.)

Nutrition and Public Health

(Code: TSB)

Degrees Offered:

Master of Science (M.S.)

Doctor of Education (Ed.D.)

Applied Physiology and Nutrition

(Code: TZR)

Degree Offered:

Master of Science (M.S.)

Community Nutrition Education

(Code: TSC)

Degree Offered:

Master of Education (Ed.M.)

Special Application Requirements/Information:

All programs have ongoing admissions, and will review applications throughout the year. Preference in scholarship awards will be for those applicants who meet the College priority deadline.

The GRE General Test is required for all programs. A writing sample is required for doctoral applicants, preferably a master's thesis, course paper, or published article.

DEPARTMENT OF HEALTH AND BEHAVIOR STUDIES

For full admittance, applicants must also provide evidence of completion of prerequisite courses, including introductory nutrition, statistics, general and organic chemistry with labs, biochemistry (requiring organic chemistry as a prerequisite) and human physiology with labs. The latter two must have been taken within 5 years with a grade of B or better. Courses in food science and in food management and a course in microbiology are also required for students wishing to become registered dietitians.

Applicants to the Dietetic Internship (DI) Program must submit directly to the Internship Director a specific DI application along with an ADA Plan V verification statement (see Nutrition Website for application form). In addition, applicants must apply for the M.S. degree and be fully admitted to the College. For students who do not have a bachelor's degree that satisfies Plan V, the needed course work can be taken at undergraduate nutrition programs in the New York metropolitan area while completing the M.S. Our ADA academic program advisor will work with students to develop an integrated plan of studies and to facilitate the process.

Admission to the doctoral programs is based upon the applicant's academic and work record. Normally a student will be formally admitted to the Doctoral program only after completion of course work equivalent to the 40-point Master of Science degrees or the 60-point Master of Education degree.

Program Description:

As we embark on the new millennium there is an increasing awareness of the fact that the quality of the diets that people habitually consume contributes to the quality of their lives.

The Program in Nutrition at Teachers College has, since its founding in 1909, been a leader in developing strategies for promoting health through encouraging dietary change.

Current academic initiatives and research focus on analyzing and facilitating change in individuals and communities, and on ways of modifying both personal choice and the food system within which such choices are made. In particular, faculty and students are engaged in a number of food and nutritionrelated demonstration and research projects which evaluate the cognitive and psychosocial factors influencing food choice in children, adolescents, and adults; characteristics of the dietary change process; nutritional epidemiology; food and environment education in schools; relationship of women and food; food policy; and social, economic, and technological factors affecting the long-term sustainability of the food system.

Building on its rich history, the Teachers College program aims to prepare graduates to take positions of leadership and service in nutrition counseling and education in health promotion and disease prevention programs in health agencies, hospitals, private practice, media organizations and the workplace; to serve as teachers or resource specialists in schools and universities; to fill a variety of planning, instructional, and administrative roles in community and public health agencies; or to serve as researchers in a variety of areas related to behavioral aspects of diet, nutrition education, nutritional epidemiology, clinical nutrition, and sustainability of the food system.

The program provides students a thorough grounding in nutrition science, nutrition education, and clinical nutrition. In addition, the program emphasizes the development of competencies in:

- Designing and implementing nutrition education with individuals, groups, and communities
- Facilitating healthful and ecological food choices
- Clinical assessments and nutrition counseling
- Understanding and applying principles of nutritional epidemiology
- Applying nutrition science and exercise science principles to exercising individuals
- Thinking critically and independently
- Acting collaboratively and effectively with others in organizations and communities with regard to important food and nutrition issues
- Conducting food and nutrition-related research

Because of the breadth of its aims, the program has long admitted academically qualified students with undergraduate degrees in fields other than nutrition or the related sciences, so long as they can meet the science prerequisites, since such students often bring valuable skills and attitudes to the graduate study of nutrition.

The program puts a heavy emphasis on providing students with practical experiences in addition to traditional classroom lectures and discussions. Among the courserelated educational experiences available to students are: team projects in community nutrition, group planning and teaching of nutrition sessions to selected audiences in the community, food education and gardening projects in schools, dietary analyses and on-line computer activities.

Students are welcome to participate in the activities of the Nutrition Program's community service organization, the Earth Friends program, a food and environmental education program designed for children, parents and teachers, which provides students opportunities to practice nutrition education. In addition, students may participate in on-going research projects. Because of Teachers College's location in New York City, there are also virtually unlimited opportunities for students to become involved in a variety of food/nutrition-related activities. The faculty and staff can arrange for students who have credit hours available to receive credit for such activities where appropriate.

Dietetic Internship

For students interested in professional certification as registered dietitians (R.D.), the Department sponsors a Dietetic Internship program accredited by the American Dietetic Association (ADA). Two cohorts are admitted per year, in September and January.

The Internship is designed to bridge a student's academic education and professional career and thus focuses on developing practitioner skills. The Internship sequence of courses (HBSV 5241-HBSV 5244) is offered on a parttime basis requiring 11 months to complete. Students may complete the Master of Science concurrently with the Internship if academic requirements have been satisfied. Students who successfully complete the Dietetic Internship are then eligible to take the registered dietitian certification examination.

Students may enroll for all degree programs on a full-time or part-time basis.

Degree requirements:

Master of Science

The major program emphases are in the fields of Nutrition Education, Nutrition and Public Health, and Applied Physiology and Nutrition. Students in all three degrees may qualify for the Dietetic Internship through coursework for the M.S. and completion of other academic prerequisites. All three M.S. degrees require the following core courses:

- HBSV 4010 Food, nutrition and behavior
- HBSV 4013 Nutritional ecology
- HBSV 4014 Community nutrition
- HBSV 5010 Advanced nutrition Section 1
- HBSV 5011 Advanced nutrition Section 2
- HBSV 5013 Strategies for nutrition education and health behavior change
- HBSV 5014 Analysis of the current literature and research in nutrition
- HBSV 5015 Nutritional epidemiology
- HBSV 5034 Clinical nutrition
- HBSV 5036 Nutrition counseling
- HBSV 5231-33 Extended fieldwork
- HBSS 6100 Measurement and evaluation in health education or
- HBSR 5582 Research design in movement sciences

In addition, all three Master of Science programs require a block of supervised fieldwork as well as a substantial integrative departmental project. Fieldwork can take place in the New York City area, in other parts of the United States, or in an international setting, depending on the interests of the student.

Nutrition Education:

Students working toward the 40 to 43-point Master of Science degree in Nutrition Education have the option of electing courses that will especially equip them to conduct individual and group counseling/patient education or to provide food and nutrition education in community, school, work site, health care, or mass media settings.

In addition to the core curriculum in nutrition science, the behavioral aspects of diet, and nutrition education, students are required to take HBSV 5513 Seminar in nutrition education. They are also required to take at least one elective in each of the categories: nature of persons and the learning process, and curriculum or planning.

Students select their remaining courses from a variety of other disciplines in keeping with their own goals and their area of specialization, including general nutrition education in communities, work sites and schools; nutrition counseling; nutrition communications; or nutrition education with a health education minor. The degree conforms to the guidelines for the training of Nutrition Education Specialists set forth by the Society for Nutrition Education.

Nutrition and Public Health: The Program in Nutrition and Public Health is an approved program of the Association of Faculties of Graduate Programs in Public Health Nutrition. Course work for the 40 to 43-point Master of Science degree conforms to the recommendations of that association, so that the degree is equivalent to one offered by a School of Public Health.

In addition to the core in nutrition science and the behavioral sciences, course work is required in vital statistics, epidemiology, program planning, and an overview of public health. Other courses in public health are selected to complement the student's previous academic background and work experiences, and to take into account the student's interests and career goals.

The Nutrition and Public Health major prepares graduates to take leadership roles in government, community, and public health agencies, carrying out a variety of planning, instructional, and administrative tasks related to health promotion and disease prevention. These include community and individual nutritional assessment and evaluation; program planning and management; coalition building; and participation in multidisciplinary health teams to provide programs to meet public needs.

Applied Physiology and Nutrition: The Program in Nutrition and the Program in Applied Physiology offer a joint course of study leading to a 45 to 48point Master of Science degree in Applied Physiology and Nutrition (APN). In addition to the core courses in nutrition, students are required to take a core of courses in applied physiology (see section below on APN for more details). The program prepares students to provide individual counseling and group education in nutrition and exercise and to design and implement exercise and nutrition programs in weight control centers, work sites, fitness centers, health centers, schools, and hospitals.

Students in this program develop competencies required by the American College of Sports Medicine for certification as an Exercise Test Technologist, Exercise Specialist, Fitness Instructor, and/or Program Director. (See section below on Applied Physiology and Nutrition for more details.)

Community Nutrition Education: The program of study for the 60-point Master of Education degree in Community Nutrition Education includes additional course work in advanced nutrition and permits a stronger emphases in the behavioral sciences, community assessment and planning, and education. A community-based, research, or other integrative project is required.

Doctoral Degrees

The Program in Nutrition Education offers Doctor of Education degrees in two areas of specialization: Nutrition Education and Nutrition and Public *Health.* The two specializations prepare graduates for a variety of leadership positions in policy-making, education and administration in schools and colleges, in government, and in public health and other service agencies. The program's goal is to turn out graduates capable of initiating needed action and of responding positively and creatively to the clearly inevitable changes of the coming decades in the physical, intellectual, and political environments in which the food, health, and educational systems operate.

The general requirements for the Doctor of Education include a minimum of 90 graduate credits, of which at least 45 must be taken under Teachers College registration. Overall, students will be expected to develop competence in nutrition science, behavioral science, methods of empirical research and data analysis, and broad areas of scholarship, in addition to developing special skills and knowledge appropri-

ate to their chosen degree in nutrition education or public health nutrition.

Students will be expected to take courses in the following categories:

- I. Major field and specialization (50–60 points)
- II. Research and evaluation (12–18 points)
- III. Broad and basic areas of professional scholarship (15–24 points)

The specific courses selected will depend on the student's particular background, interests and goals. In consultation with a Faculty Advisor, students should develop a program plan early in their course of study to provide a rational basis for their course selection. Students will also be expected to pass a certification examination usually after the completion of 60 points and Research Seminar in Nutrition (HBSV 6550-6551) and to write a dissertation. (See Nutrition Program descriptions of the doctoral degree requirements.)

Courses:

Introductory courses

HBSV 4000. Introduction to nutrition: facts, fallacies, and trends (3)

Dr. Sporny and Professor Contento (Fall). Prerequisites: None (Course is offered to nonmajors and to those desiring admission to the Nutrition Program and to the Dietetic Internship Program.) Overview of the science of nutrition and its relationship to health, taught through an analysis of historic and contemporary controversies, such as fat versus carbohydrates in the diet; vegetarianism; and supplement use. Special attention will be paid to American trends in food consumption and their impact on health and to the dietary practices employed in the pursuit of weight maintenance, health, and fitness.

HBSV 4007. Foods and their uses (1)

Faculty. A practical course for nutrition majors and nonmajors who wish to learn food composition and how to use food in nutritionally, ecologically, economically, and culturally appropriate ways.

HBSV 4010. Food, nutrition and behavior (3)

Professor Contento. For nonmajors and majors. A study of physiological, psychological, and socio-cultural factors that affect eating behaviors and the development of individual and cultural food patterns. Topics include: the chemical senses, why we like sweet, salt, and fat; self-regulation of what and how much we eat; effect of early experiences with food; food and mood; interaction of food and culture through history; eating, cooking, and time use trends; meat meanings; psychosocial and cultural factors in food choice.

HBSV 4011. Women and weight, eating problems and body image (2)

Drs. Akabas and Bernstein. An intense, two-week short course held in the summer. This course for students and practitioners examines the psychological, sociological, physiological, and nutritional issues related to weight, eating disorders, body image and cultural messages as they relate to women. Potential interventions are also examined. The issues will be discussed using case material, films and the current research literature. Taught by a licensed psychologist and a nutritionist.

HBSV 4013. **Nutritional ecology** (2–3)

Dr. Liquori and Professor Gussow. A course for non-majors and majors. Nutrition and food as viewed from a global, ecological perspective. Topics include: food/population problems and food aid, food product development and promotion here and abroad, energy and food relationships, food safety and the changing American diet, organic agriculture and natural food, biotechnology, and other topics as appropriate.

HBSV 4014. Community nutrition (2)

Professor Kushi. This course provides an understanding of where and how food and nutrition services are delivered to further the national goal of healthy people in healthy communities and of the roles of nutrition professionals in providing these services. Nutrition services, both private and government sponsored, will be the primary focus. The course will also examine the roles of the nutrition professional, including the attributes, training and certifications needed to fill the roles.

HBSV 4150. Sports nutrition (3) Dr. Dolins (Summer Session A). For nonmajors only. A practical course designed to assist health professionals give the most accurate and up-to-date information to active people to help them improve health and performance. Integration of principles of nutrition and exercise physiology and application to exercising individuals. Topics for discussion include energy expenditure, fuel substrate metabolism, specific nutrient needs, ergogenic aids, hydration, and weight issues for exercising individuals and athletes.

HBSV 4902. Research and independent study in nutrition education (1 or more)

Permission required. Master's degree students undertake research and independent study under the direction of a faculty member.

Intermediate and Advanced Courses

HBSV 5010. Advanced nutrition Section 1 (3)

Dr. Simpson. In-depth review of current knowledge and research on biochemical and physiological aspects of energy metabolism, carbohydrates, lipids and lipid metabolism, and proteins; regulation of intake and impact on health and disease.

HBSV 5011. Advanced nutrition Section 2 (3)

Dr. Pinto. In-depth review of current knowledge and research on the biochemical and physiological aspects of vitamins, minerals and phytonutrients; applications to diet.

HBSV 5013. Strategies for nutrition education and health behavior change (3)

Professor Contento. Understanding and application of theoretical frameworks from the behavioral sciences and education to design and deliver food and nutrition education and exercise promotion to various groups and to facilitate the adoption of healthful behaviors. Includes both didactic and field practice components.

HBSV 5014. Analysis of current literature and research in nutrition (3)

Professor Wolf. Critical examination and evaluation of current controversies and issues in nutrition and food. Topics are reviewed and discussed in depth. Students learn how to analyze the medical and layperson literature concerning such topics as dietary fat and disease, calcium and osteoporosis, fruit/vegetables and cancer, weight loss regimens, supplements and alternative therapies.

HBSV 5015. Nutritional epidemiology (3)

Professor Wolf. Study of methods for assessing food and nutrient intake, energy expenditure, and body composition, and for evaluating nutritional status of individuals and communities from clinical assessments, dietary intakes, and behavioral evaluation.

HBSV 5018. Nutrition and human development (3)

Dr. Sporny (Summer Session A). The focus of this course is on the physiologic changes and nutritional needs throughout the life cycle. Pregnancy, fetal development, infancy, childhood, adolescence, adulthood, and the later years will be examined. Special attention will be paid to the following issues: breast feeding versus bottle feeding, introduction of solid foods to infants, coping with picky eaters, maintaining a healthy feeding relationship between caregiver and child, preventing health and dietary problems in children and adolescents (including disordered eating), women's nutrition and reproductive function, menopause and hormone replacement therapy, and the changes that occur in an aging person and the dietary modifications needed to promote health and prevent disease.

HBSV 5031. Nutrition administration (1–3)

Faculty. Managing nutrition/ health programs in private practice and community settings. Includes managing self and staff in terms of time and budget; seeking funding; planning and marketing.

HBSV 5034. Clinical nutrition (3)

Ms. Hamilton. This course is designed to provide students in nutrition and other health sciences with an overview of the pathophysiology of disease and resultant nutritional implications. The course provides a vocabulary which will enable students to converse with other medical professionals, a rationale for medical nutrition therapy and parameters for monitoring nutritional status of patients in a clinical setting.

HBSV 5036. Nutrition counseling (2)

Ms. Mesznik. This course focuses on providing students an understanding of client-centered counseling models and practicing a variety of essential skills: nonverbal, active listening, goal assessment, motivational interviewing and group counseling. Special fee: \$10.

HBSV 5231-HBSV 5233. Extended fieldwork in nutrition and education, nutrition and public health, and applied physiology and nutrition

Dr. Sporny. A block of supervised field experience required of all degrees. Fieldwork is taken near completion of course work.

- HBSV 5231. Nutrition and public health (2–4)
- HBSV 5232. Nutrition and education (2–4)
- HBSV 5233. Applied physiology and nutrition (2–4)

HBSV 5241-5244. Dietetic Internship in nutrition
Ms. Costa. Internship in service settings in metropolitan New
York, Rockland and Westchester counties and Southern Connecticut. It includes experiences in clinical nutrition, community nutrition, food service management and research in dietetics. Cumulative experience totals 1000 hours. Mal-

practice/ personal liability insurance, health insurance, lab coat, and physical exam required.

- HBSV 5241. Internship in clinical nutrition (3)
- Ms. Costa. Special fee: \$150.
- HBSV 5242. Internship in community nutrition (3) Ms. Costa. Special fee: \$150.
- HBSV 5243. Research and Independent Practice (2) Dr. Sherman. Special fee: \$20.
- HBSV 5244. Internship in food service (2)

Ms. Maro. Special fee: \$20.

HBSV 5333. Practicum in community service (1–2)

Dr. Koch. Practical experiences in community, food, and nutrition programs.

HBSV 5513. Seminar in nutrition education: theory and applications (2)

Professor Contento. An in-depth examination of the use of current theories and research in the design, implementation, and evaluation of nutrition education interventions. Course is designed to supplement topics covered in HBSV 5013. Required of nutrition education maste'rs and doctoral students. Students may register for more than one semester.

HBSV 5593. Seminar in nutrition in exercise and sport (2–3) Dr. Dolins. Discussions of interactions between exercise and nutrition as applied to health and fitness. Controversial topics emphasized. Majors in either applied physiology or nutrition are eligible to enroll during their second year of study. (See also section on the interdisciplinary Applied Physiology and Nutrition degree program in this catalog.)

Advanced Seminars and Research

HBSV 5902. Guided study in nutrition (1–4)
Faculty. Opportunity for advanced students to investigate areas of special interest in nutrition.

HBSV 6500-HBSV 6501. Seminar in nutrition (3 per section) Professors Contento and Kushi. For doctoral and other advanced students. Evaluative discussion of current literature on specific nutrition and food-related topics.

HBSV 6550-HBSV 6551. Research seminar in nutrition (2–3 per section)

Professors Contento and Kushi. Required of all Ed.M. and Ed.D. candidates. Discussion of current research issues and student projects. Students may register for more than one semester. Sections: (1) Professor Contento (2) Professor Kushi.

HBSV 6902. Research and independent study in nutrition (1–4) Professors Contento and Kushi. Open to matriculated doctoral students. Research and independent study under faculty direction. Sections: (1) Professor Contento (2) Professor Kushi.

HBSV 7502. Dissertation seminar in nutrition (2–3)

Professors Contento and Kushi. Development of doctoral dissertations and presentation of plans for approval. Sections: (1) Professor Contento (2) Professor Kushi

HBSV 8900 Dissertation advisement in nutrition (0)

Advisement on doctoral dissertations. Fee: equal to 3 points at current tuition rate for each term. For requirements, see catalog on continuous registration for Ed.D. degree. Sections: (4) Professor Contento (5) Professor Kushi

Applied Physiology and **Nutrition**

(Code: TZR)
Program Coordinators:
Professor Isobel R. Contento
(Nutrition)
Professor Ronald DeMeersman
(Applied Physiology)
Program Offices: 678-3950 or
678-3325

Degree Offered: Master of Science (M.S.)

Special Application Requirements/Information: This program has ongoing

This program has ongoing admissions, and will review applications throughout the year.

The GRE General Test is required. Prerequisites for admission include a strong academic background, including at least one course each in statistics, general and organic chemistry, introduction to nutrition, human physiology, and biochemistry, the latter two taken within the last five years, in which grades of B or better were earned. The biochemistry course must have had as a prerequisite at least a one-semester course in organic chemistry. Applicants who are deficient in the required background in physiology and chemistry may be admitted on probation, with the understanding that the deficiencies will be completed in the first year of study.

The undergraduate specializations that provide the most relevant foundations for the APN program include nutrition, exercise physiology, physical education, biology, physical therapy, nursing, health education, and psychology.

Program Description:

The Program in Nutrition and the Program in Applied Physiology offer a joint 45 to 48point Master of Science degree program. There are two main rationales for this program. First, both disciplines are concerned with the theory of energy intake, transformation, and liberation. Second, there are many practical problems that can be more satisfactorily addressed by attending to both nutrition and exercise than by attending to either one alone. Most prominent are health problems such as obesity, cardiovascular disease, diabetes, and osteoporosis.

Health professionals and educators need to know how these two aspects of lifestyle interact in children and adults to enhance health and prevent disease. Another application is

to sports performance, physical fitness, and ergonomics. Coaches, athletes, teachers, and work physiologists can profit from an understanding of how nutrition and exercise interact to influence work capacity. To be effective in applying these concepts, professionals must be aware of appropriate educational and behavioral change theory and strategies.

The program prepares students

- · Provide individual counseling and group instruction in nutrition and exercise
- Design, implement, and evaluate exercise and nutrition programs in schools, weight control centers, work sites, recreational agencies, health centers, and hospitals
- Evaluate and apply research

Degree Requirements:

Students take a set of core courses in both nutrition and applied physiology. While the program provides a solid foundation in the scientific basis of nutrition and exercise, it also emphasizes practical applications in all courses. The applied physiology lab courses provide hands-on experience in physiological measurement techniques. The interviewing and assessment courses provide firsthand experience in collection of nutritional data. Courses in behavioral or educational methods provide insight into how applications are made in clinical or educational settings.

There are two tracks from which students may choose. Students in the fieldwork track participate in clinical or educational fieldwork in some setting that provides services/education in both exercise and nutrition, such as work site fitness programs, health promotion projects, etc. Such fieldwork develops concrete application skills. Our location in New York City provides

ready access to a wide range of field experiences and professional contacts that are helpful in securing employment after graduation. Contact Dr. Sporny for details at 212-678-3952 or Golora@msn.com.

Students in the research track learn to conduct research by participating in ongoing research projects involving the interaction of exercise and nutrition. Contact Professors DeMeersman or Contento for a list of current projects and resources.

Students in both tracks can complete the academic requirements for dietetic registration (R.D.) through coursework for the M.S. and programs in the New York area approved by the American Dietetic Association (ADA). Our ADA didactic program advisor will work with students to develop an integrated plan of studies and to facilitate the process. The Program in Nutrition offers a Dietetic Internship. Students may complete the Master of Science concurrently with the Internship if academic requirements have been satisfied. In addition, the program provides the academic background needed for the various certifications of the American College of Sports Medicine.

The M.S. in Applied Physiology and Nutrition requires the following core of courses:

- BBSR 4095-4195 Applied physiology Section 1 and lab Section 1
- BBSR 5194 Applied physiology lab Section 2
- BBS 5069 Brain and behavior Section 1
- BBS 5060 Neuro motor responses and adaptation to exercise
- BBSR 5095 Exercise and health
- HBSV 5010-5011 Advanced nutrition Section 1 and Section 2

- HBSV 5014 Analysis of current literature and research in nutrition
- HBSV 4010 Food, nutrition and behavior
- HBSV 4013 Nutritional ecology
- HBSV 4014 Community nutrition
- HBSV 5034 Clinical nutrition
- HBSV 5036 Nutrition counseling
- HBSV 5013 Strategies for nutrition education and health behavior change
- HBSV 5015 Nutritional epidemiology
- HBSR 5582 Research design in movement sciences
- HBSS 6100 Measurement and program evaluation
- HBSV 5593 Seminar in nutrition in exercise and sport

Special Education

Program Coordinators: see below

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

Administration of Special Education Programs

(Code: TEF) Program Coordinator: Professor Dennis Mithaug Degree Offered: Ed.D.

Applied Behavior Analysis (Autism, Emotional Disturbance)

(Code: TEK) Program Coordinator: Professor R. Douglas Greer Degrees Offered: M.A., Ed.D., Ph.D.

Blindness and Visual Impairment

(Code: TEB) Program Coordinator: Dr. Virginia S. Stolarski Degrees Offered: M.A., Ed.D.

Cross-Categorical Studies

(Code: TEZ) Program Coordinator: Professor Dennis Mithaug Degree Offered: Ed.D.

Deaf and Hard of Hearing

(Code: TED) Program Coordinator: Professor

Robert Kretschmer Degrees Offered: M.A., Ed.D. Ph.D. in Physical Disabilities

Guidance and Habilitation

(Code: TEG) Program Coordinator: Professor Linda Hickson Degree Offered: M.A.

Instructional Practice in Special Education

(Code: TEA) Program Coordinators: all

faculty

Degree Offered: Ed.M.

Mental Retardation (including Autism)

(Code: TEM)

Program Coordinator: Professor Linda Hickson

Degrees Offered: M.A., Ed.D., Ph.D.

Physical Disabilities

(Code: TEP)

Program Coordinators: Professor Dennis Mithaug, Dr. Virginia S. Stolarski, and Professor Robert Kretschmer

Degrees Offered: M.A., Ed.D., Ph.D.

Research in Special Education

(Code: TER) Program Coordinators: Profes-

sors Linda Hickson and R.

Douglas Greer

Degree Offered: Ed.D.

Supervision of Special Education

(Code: TES)

Program Coordinator: Professor

Dennis Mithaug Degree Offered: Ed.M.

Special Application Requirements/Information: All Applicants: Interviews are required for applicants to the Blindness and Visual Impair-

ments. Deaf and Hard of Hearing, and Mental Retardation programs. Other program coordinators may arrange for applicants to have an admissions interview.

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

M.A. Applicants: Experience in special education is not a prerequisite for acceptance.

Doctoral Applicants: Submit an academic or professional writing sample.

Program Description:

The special education programs at Teachers College build upon a more than 75-year tradition of leading the field of special education in policy, practice, and research for individuals with disabilities across the age span.

Students who earn M.A., Ed.M., Ed.D., and Ph.D. degrees in special education from Teachers College assume leadership and scholarly positions at all levels of professional activity including public and private schools, community and national service agencies, hospital and rehabilitation programs, colleges and universities, research centers, and local, state, and federal educational agencies.

The graduate course work, independent studies, research projects, and dissertations draw from the following five areas:

- Special Education Foundations. Includes course work on theories of process and models of practice, cognitive structure and process, behavioral selectionism and complex behavior, disability constructs, equity and excellence in public policy, psycholinguistics and verbal behavior, and family studies and child development.
- Service Delivery Systems. Includes administration and supervision, pedagogy, enrichment and acceleration, interdisciplinary programming, community-based systems change, infancy/early childhood intervention, elementary education, transition and habilitation, urban education, and technology.
- Exceptionality Areas. Provides course work in behavioral disorders (e.g., autism, emotional disturbance), blindness and visual impairment, deafness and hearing impairment, mental retardation and intellectual disability (including autism), physical disabilities, and multiple handicapping conditions including intellectual disabilities coupled with sensory and/or physical disabilities.
- Assessment and Intervention Strategies. Includes management of social and unsocial behavior, communication and language, mobility, mathematics, reading, problem solving, visual skills and visual perceptual processing, and self-regulation.
- Research and Evaluation. Includes applied behavior analysis, experimental research with individuals, group experimental design, program evaluation, ethnography, and post-positivistic inquiry.

In addition to lectures and seminars in the preceding five areas of study, students participate in special projects and complete practicum assignments in a variety of settings, which include the following:

The Center for Educational and Psychological Services (CEPS) provides learner-centered demonstrations of assessments and evaluations, instructional practices, and follow-up evaluations that promote studentdirected learning and performance across settings and time. Special education students work in collaboration with students from school psychology, health and nutrition as well as clinical and counseling psychology programs. The CEPS provides opportunities for practicum experience and research-based demonstrations of effective practice. The CEPS has an extensive remediation and testing library, and testing rooms, observation rooms, and audio and video recording capabilities available for graduate student use.

The Center for Opportunities and Outcomes for People with Disabilities provides support for research, evaluation, and demonstration efforts aimed at increasing opportunities for individuals with special needs to become fully included members of society.

The Center provides opportunities for students to participate in research and evaluation projects in such areas as diversity and cultural differences; language and communication; motivation and verbal behavior; systems of schooling and models of service delivery; inclusion and its social impact; families and siblings; cognition, personality, problem solving, and selfregulated thinking; reading, literacy, and the arts; interpersonal decision-making and abuse prevention, personnel preparation; social justice and social policy; and self-determination and independence.

The Fred S. Keller School, New Rochelle CABAS(r) Program, David Gregory School and The Margaret Chapman School serve as training and research sites for students enrolled in the behavioral disorders and behavior analysis programs in special education. These schools use comprehensive applications of behavior analysis (CABAS(r)) within a cybernetic system. They provide training and research that is responsive to student behavior and consistent with the epistemological tenets of behavioral selectionism. Students in the M.A. Program in Behavioral Disorders are required to do their practica at CABAS(r) schools.

The Department maintains close working relationships with a wide network of public and private schools, agencies, and clinical facilities. Students may participate in field-based activities ranging from the Very Special Arts Festival hosted by the New York City Board of Education and Teachers College to tutoring programs for children with disabilities living in neighborhood communities.

Financial Aid

In addition to College-wide financial aid, instructional, research, and administrative internships may be available through the Program in Special Education. The Department collaborates with schools and agencies in the metropolitan area to provide internships. When funds are available, federal traineeships and assistantships are awarded by the program to qualified students. In order to be eligible for a federal traineeship, an applicant must be a United States citizen and be fully admitted to a degree program.

Students are encouraged to apply for all types of financial aid for which they are eligible. Paid internships are available for some students who have been admitted to the Program in Behavioral Disorders. The New York City Board of Education has, for a number of years, provided full scholarships for anyone interested in becoming a teacher for individuals who are deaf or hard of hearing, and blind or visually impaired. Endowed fellowships and research assistantships are available to students who are preparing for careers in the education of people with mental retardation and intellectual disability.

Degree Requirements:

Master of Arts

Applied Behavior Analysis Blindness and Visual Impairment Deaf and Hard of Hearing Guidance and Habilitation Mental Retardation Physical Disabilities

Students who enroll in the M.A. programs prepare for positions as teachers and clinicians who serve individuals with a full range of abilities and disabilities in a wide array of settings based in schools, communities, and agencies. They specialize in serving individuals with disabilities across the age span, birth to death, from one or more of the above service delivery categories.

Students who gain admission work with a faculty advisor to design a program that meets their interests and fulfills the requirements for a degree in special education with related New York State teacher certification. Candidates for the M.A. degree must complete supervised practica requirements arranged on the Teachers College campus and in schools and

agencies in the City. They also must complete an integrative project, or, in the case of the Program for Educators of People with Blindness and Visual Impairment, complete a comprehensive examination, prior to award of the degree. In designated programs, master's degree course work also fulfills the requirements for New York State Certification as a Teacher of Special Education, Teacher of the Blind and Partially Sighted, or Teacher of the Deaf and Hard of Hearing.

Core Departmental Requirements for Special Education M.A. Students

- HBSE 4002 Instruction and curriculum for students with and without disabilities
- HBSE 4003 Foundations for teaching all students to maximize learning (formerly HBSE 4092)
- HBSE 4015 Applied behavior analysis Section 1—pedagogy, management and curriculum
- HBSE 4079 Language development and habilitation: the foundation
- HBSE 4082 Assessment and evaluation of infants, children and youth with exceptionalities (Prerequisite for HBSE 4082—Section 2)
- HBSE 4082—Section 2
 Practicum in assessment and evaluation of infants, children and youths with exceptionalities (required for majors in TEB, TEM, and TEP)

Specialization Requirements, Applied Behavior Analysis (TEK):

- HBSE 4015 Applied behavior analysis Section 1: pedagogy, management and curriculum
- HBSE 4041 Education of persons with behavioral disorders (two courses)
- HBSE 4043 Applied behavior analysis Section 2: pedagogy, management and curriculum

 HBSE 4704 Observation and student teaching in special education (3 points each term)

Specialization Requirements, Blindness and Visual Impairments (TEB):

- HBSE 4060 Psycho-social implications of vision loss on people with blindness and visual impairment and their families
- HBSE 4061 Anatomy and physiology of the visual system and related implications
- HBSE 4062 Instruction and curriculum development for infants, children and youth with blindness and visual impairment
- HBSE 4063 Communication skills for people with blindness and visual impairments I
- HBSE 4064 Communication skills for people with blindness and visual impairments II
- HBSE 4700 Pre-student teaching seminar (required for pre-service applicants)
- HBSE 4706 Observation/student teaching in special education: BVI (or HBSE 5306 Section 1)
- HBSE 4880 Opportunities and outcomes for people with disabilities, Section 2
- HBSE 5062 Orientation and mobility
- HBSE 5306 Advanced practica in special education:
 BVI, Section 1—teaching (or HBSE 4706)
- HBSE 5306 Advanced practica in special education:
 BVI, Section 2—assessment and evaluation (or HBSE 4300)
- HBSE 5063 Technological aids and assistive devices in the education of toddlers, children and youth with disabilities (or HBSE 4005)
- HBSE 4871 American Sign Language I

Specialization Requirements, Deaf and Hard of Hearing (TED):

- HBSE 4070 Psychosocial and cultural aspects of individuals who are deaf or hard of hearing, Section 1
- HBSE 4070 Psychosocial and cultural aspects of individuals who are deaf or hard of hearing, Section 2
- HBSE 4071 Methods of teaching reading and writing to individuals who are deaf or hard of hearing
- HBSE 4071 Language, reading, and writing instruction in the content areas for individuals who are deaf or hard of hearing
- HBSE 4072 Development of language of individuals who are deaf or hard of hearing
- HBSE 4073 Teaching of speech to individuals who are deaf or hard of hearing
- HBSE 4074 Linguistics of American Sign Language
- HBSE 4079 Language development & habilitation: the foundation
- HBSE 4700 Observation and teaching of individuals who are deaf or hard of hearing
- HBSE 4700 Observation and student teaching of individuals who are deaf or hard of hearing
- HBSE 4871 American Sign Language Section 1
- HBSE 4872 American Sign Language Section 2

Non-Department Requirements:

- A&HL 4101 Phonetics and phonology
- BBSQ 4042 Introduction to audiology
- BBSQ 5125 Clinical approaches to aural habilitation

Specialization Requirements, Mental Retardation (TEM):

- HBSE 4000 Introduction to special education
- HBSE 4001 Teaching students with disabilities in the general education classroom

- HBSE 4005 Applications of technology in special education
- HBSE 4006 Working with families of children with disability
- HBSE 4010 Nature and needs of students with mental retardation
- HBSE 4011 Education of students with mental retardation
- HBSE 4700 Pre-student teaching seminar
- HBSE 4701 Observation & student teaching in mental retardation—Section 1
- HBSE 4701 Observation & student teaching in mental retardation—Section 2
- HBSE 4880 Section 2
 Opportunities and outcomes for people with disabilities

Specialization Requirements, Physical Disabilities, Pre- & In-Service (TEP):

- HBSE 4010 Nature and needs of students with mental retardation
- HBSE 4011 Education of students with mental retardation
- HBSE 4031 Education of students with physical disabilities
- HBSE 4040 Introduction to behavioral disorders
- HBSE 4083 Theory and techniques for educating infants, children and youth with sensory impairments
- HBSE 4700 Pre-student teaching seminar
- HBSE 4703 Observation & student teaching in physical disabilities—Section 1
- HBSE 4703 Observation & student teaching in physical disabilities—Section 2
- HBSE 4880 Section 2
 Opportunities and outcomes for people with disabilities

Master of Arts

Guidance & Habilitation (TEG)

The M.A. in Guidance and Habilitation, which does not lead to New York State teacher certification, is available to interested students with a broad range of career goals.

Required Department Courses:

- HBSE 4003 Foundations for teaching all students to maximize learning (formerly HBSE 4092)
- HBSE 4010 Nature and needs of students with mental retardation
- HBSE 4011 Education of students with mental retardation
- HBSE 4015 Applied behavior analysis
- HBSE 4060 Psycho-social implications of vision loss on people with blindness and visual impairment and their families
- HBSE 4070 Nature and needs of individuals who are deaf or hard of hearing
- HBSE 4071 Language, reading, and writing instruction in the content areas for individuals who are deaf or hard of hearing
- HBSE 4082 Assessment & evaluation of infants, children and youth with exceptionalities
- HBSE 4092 Introduction to foundations of special education opportunity
- HBSE 4880 Section 2
 Opportunities and outcomes for people with disabilities,
- HBSE 5309 Advanced practica in special education: habilitation of persons with developmental disabilities
- HBSE 5909 Problems in special education: guidance, habilitation, & career education
- HBSE 6004 Policy and administration

Master of Education

Instructional Practice in Special Education (TEA)
Supervision of Special Education Programs (TES)

Students interested in advanced study in selected areas of special education may seek the Ed.M., which represents a broadening and refinement of knowledge and skills in areas such as those listed above. Award of the Ed.M. requires satisfactory completion of a special project reflecting the attainment of advanced professional competencies. Successful candidates for the Ed.M. are eligible for additional certifications as well. The Ed.M. in Supervision of Special Education Programs leads to New York State supervisory certification.

Ed.M. Instructional Practice (TEA)

Core Requirements for all Ed.M. Special Education Majors:

- HBSE 5010 Study of the philosophic foundations of special education
- HBSE 6010 Advanced study of problems and issues in special education

Specialization Requirements: Students work in collaboration within faculty advisor to select course work that builds upon their previous professional experiences and increases their current repertoire of skills and knowledge.

Non-Department Courses Required for All Student Majors in Degree Program:

- HUDM 4122 Probability and statistical inference
- HUDM 5122 Applied regression analysis

Supervision of Special Education Programs (TES)

Department Courses Required for All Student Majors in Degree Program

Core Requirements for all Ed.M. Special Education Majors:

- HBSE 5010 Study of the philosophic foundations of special education
- HBSE 6001 Research in special education—quantitative/empirical—Section 1
- HBSE 6001 Research in special education-qualitative methods—Section 2
- HBSE 6001 Research in special education-single subject design—Section 3
- HBSE 6010 Advanced study of problems and issues in special education

Specialization Requirements:

- HBSE 4092 Introduction to foundations of special education opportunity
- HBSE 5310 Advanced practica in special education: policy and administration in special education
- HBSE 6002 Administration of special education programs
- HBSE 6004 Public policy and administration in special education
- HBSE 6410 Advanced internship: policy and administration in special education

Non-Department Courses Required for All Student Majors in Degree Program:

- ORLA 4001 Overview of administration
- ORLA 4021 Introduction to management systems
- ORLA 4039 Leadership and institutional analysis: Administration of elementary schools
- ORLA 4042 The role of the state in education governance, policy & practice
- HUDM 4122 Probability and statistics

HUDM 5122 Applied regression analysis

Doctor of Education

Exceptionality Focus Areas:
Applied Behavior Analysis
Blindness and Visual
Impairment
Cross-Categorical
Deaf and Hard of Hearing
Mental Retardation
Physical Disabilities

Professional Specialization Areas:
Academic Cognate
Administration and
Supervision
Instructional Leadership
Pedagogy
Research and Evaluation
Technology in Special
Education
Urban Special Education

Students of exceptional ability who are interested and committed to contributing to special education through leadership and scholarly work may apply for the Ed.D. degree, which represents the highest level of achievement in the profession. The doctoral program prepares graduates to assume leadership roles in teacher education programs in colleges and universities in this country and in other countries, to administer special education programs in schools and agencies, and to conduct research in special education and related services.

Students may focus their work and course of study by exceptionality focus, by age of pupil, and by professional specialization. Students may tailor their course work to meet minimum requirements for New York State certification as School Administrator and Supervisor.

Doctor of Philosophy

Exceptionality Focus Areas:
Applied Behavior Analysis
Mental Retardation
Physical Disabilities (including
Blindness and Visual Impairments, Deaf and Hard of
Hearing)

Research and Evaluation Emphasis

Students with excellent potential as researchers and theoreticians who are interested in scholarly careers in special education, education, and related social sciences may apply for the Ph.D. degree program, which represents the highest level of achievement in the Arts and Sciences. This degree program is administered jointly by Teachers College and the Graduate Faculty of Columbia University. Prospective students may obtain information on program offerings by contacting the program office.

Department Courses Required for All Student Majors in Degree Program

Core Requirements for all Ed.D. and Ph.D. Special Education Majors TEB, TED, TEF, TEK, TEM, TEP, TEZ):

- HBSE 5010 Study of the philosophic foundations of special education
- HBSE 6001 Research in special education—quantitative/empirical—Section 1
- HBSE 6001 Research in special education-qualitative methods—Section 2
- HBSE 6001 Research in special education-single subject design—Section 3
- HBSE 6010 Advanced study of problems and issues in special education
- HBSE 7500 Dissertation seminar in special education
- HBSE 8900 Dissertation advisement in special education

Specialization Requirements, Administration & Supervision (TEF):

- HBSE 4003 Foundations for teaching all students to maximize learning (formerly HBSE 4092)
- HBSE 5310 Advanced practica in special education: policy and administration in special education
- HBSE 6002 Administration of special education programs
- HBSE 6004 Public policy and administration in special education
- HBSE 6410 Advanced internship: policy and administration in special education

Specialization Requirements, Blindness and Visual Impairment (TEB):

- HBSE 5063 Technological aids and assistive devices in the education of toddlers, children and youth with disabilities (or HBSE 4005)
- HBSE 5901 Problems in special education: mental retardation
- HBSE 5906 Problems in special education: blindness and visual impairment (minimum two semesters, 3 points each term)
- HBSE 6406 Advanced internship: blindness and visual impairment (minimum two semesters, 3 points each term)
- HBSE 6506 Advanced seminar: blindness and visual impairment (minimum two semesters, 3 points each term)

Specialization Requirements, Applied Behavior Analysis (TEK):

- HBSE 5040 Behavior analysis: advanced seminar
- HBSE 5304 Advanced practica in special education: behavior disorders
- HBSE 5904 Problems in special education: behavior disorders

- HBSE 5915 Organization and supervision of special education through organizational behavior analysis
- HBSE 6015 Verbal behavior
- HBSE 6031 Single case experimental design in education, medicine, and therapy
- HBSE 6504 Advanced seminar: special education-behavior disorders

Specialization Requirements, Deaf and Hard of Hearing(TED):

- HBSE 5307 Advanced practica in special education: deaf or hard of hearing
- HBSE 5907 Problems in special education: deaf and hard of hearing
- HBSE 6070 Psychology of deafness
- HBSE 6407 Advanced internship: deaf and hard of hearing
- HBSE 6507 Advanced seminar: special education-deaf and hard of hearing

Specialization Requirements, Mental Retardation (TEM):

- HBSE 5301 Advanced practica in special education: mental retardation and intellectual disability
- HBSE 5901 Problems in special education: mental retardation and intellectual disability
- HBSE 6401 Advanced internship: mental retardation and intellectual disability
- HBSE 6501 Advanced seminar-special education: mental retardation and intellectual disability

Specialization Requirements, Physical Disabilities (TEP):

- HBSE 5303 Advanced practica in special education: physical disabilities
- HBSE 5903 Problems in special education: physical disabilities
- HBSE 6403 Advanced internship: physical disabilities

 HBSE 6503 Advanced seminar: physical disabilities

Specialization Requirements, Research in Special Education (TER):

- HBSE 5312 Advanced practica in special education: research
- HBSE 5912 Problems in special education: research
- HBSE 6412 Advanced internship: research
- HBSE 6512 Advanced seminar: research

Non-Department Courses Required for All Student Majors in Degree Program

- HUDM 4122 Probability and statistical inference
- HUDM 5122 Applied regression analysis

Courses:

A complete listing of the course offerings in Special Education appears below. Courses required for degree programs generally are given one or more times each year. Specific details regarding scheduled times for particular courses may be obtained by contacting the program coordinator or by consulting the schedule of classes which is published each semester by the College.

Foundations, Exceptionalities, and Methods

HBSE 4000. Introduction to special education (2-3) Dr. Stolarski (Fall, Spring, Summer Session A) or Dr. Lipkowitz (Summer Session B). Enrollment limited to 25 students. Emphasis is placed on the identification of characteristics of individuals with disabilities and the impact of the characteristics on the learner and family members of the learner. The course is a study of the nature, psycho-social and educational needs of individuals, across the life-span, with physical, mental, emotional, or sensory impairments. Particular attention is placed on the way

these special education programs fit, or should fit, into ongoing work in schools. Special fee: \$25.

HBSE 4001. Teaching students with disabilities in the general education classroom (2–3) Professor Mithaug (Summer Session A) or Dr. Convertino (Spring). Problems of educational assessment, curriculum and teaching, organization, and guidance of students with physical, cognitive, affective, and sensory disabilities.

HBSE 4002. Instruction and curriculum for students with and without disabilities (2–3) Professor Hickson. Curriculum development and research validated methods of instructing students with and without disabilities from early childhood through adolescence, including methods of teaching reading and mathematics and methods of enrichment and remediation. Materials fee: \$10.

HBSE 4005. Applications of technology in special education

Dr. Pawelski. This course is intended to provide pre-service and in-service special education teachers with basic information on assistive and instructional technology appropriate for use with infants, children and youths who require special education and related services. Materials fee: \$25.

HBSE 4006. Working with families of children with disabilities (2–3)

Dr. Stolarski or Dr. Culverhouse. Current and historical perspectives on parent involvement in the special education and empowerment of infants, children, and youth with disabilities and their families. Emphasis on strategies and materials to facilitate a continuum of parent and family participation to strengthen the relationships between home, school and the community. Students are trained in conflict resolution. Special fee: \$10.

HBSE 4008. Disability: reconsidered and reconstructed (2–3) Dr. Bejoian. The course introduces students to the study of disability as social construct framed within a reconstructivistic context that challenges current theoretical and practical approaches and incorpo-

rates individual, interpersonal, educational, and organizational perspectives. Special fee: \$10.

HBSE 4010. Nature and needs of persons with mental retardation and intellectual disabilities (2–3)

Professor Hickson. Characteristics of persons manifesting different degrees of mental retardation/intellectual disability, autism and other developmental disabilities throughout the lifespan. The course emphasizes implications for educational programming, curriculum and instruction. Materials fee: \$10.

HBSE 4011. Education of persons with mental retardation and intellectual disabilities (2-3)

Dr. Urv. Curriculum development and research validated methods of instructing students with mental retardation/intellectual disability, autism and other developmental disabilities from early childhood through adolescence across ability levels. Materials fee: \$20.

HBSE 4012. Program and curriculum development for persons who are severely/profoundly handicapped (2–3)
Professor Hickson. Program and curriculum development for children with severe/profound handicaps at different maturational levels. Identification and critical analysis of existing curricula, methods, materials; evaluation and use of community resources. Materials fee: \$10.

HBSE 4015. Applied behavior analysis I: pedagogy, management, and curricula (2–3) Professor Greer. Basic applications for learners without reading or writing repertoires. Strategic applications of the science of behavior to instruction, management, curriculum-based assessment, isolation of locus of learning/behavior problems, measurably effective instructional practices.

HBSE 4031. Education of students with physical disabilities (2–3)

Dr. Pawelski. Curriculum development and research validated methods of instructing students with physical disabilities from early childhood through adolescence in regular classes, special classes, hospitals, and home instruction.

HBSE 4040. Introduction to behavioral disorders in children and young adults (2–3) Professor Greer. Origins and descriptions of behavioral disorders and social maladjustment; ontogenetic and phylogenetic evidence, overview of treatments.

HBSE 4041. Education of persons with behavioral disorders (2–3)

Dr. Twyman. Permission required. Fall: Assessment, curriculum design, and methodology for teaching and remediating the behavioral disorders of young children with or without developmental disabilities and adolescents with developmental disabilities and related conditions (i.e., autism); Professor Greer for Summer A: Assessment, curriculum design, and methodology for teaching and remediating the behavioral disorders of children and adolescents without developmental disabilities. Materials fee: \$10 each semester.

HBSE 4043. Applied behavior analysis II: pedagogy, management, and curricula (2–3) Professor Greer. Prerequisite: HBSE 4015. Advanced applications to learners with writing, reading, and self-editing repertoires. Teaching operations and curricula designed to teach academic literacy, self-management, and problem solving. Data based applications required. Special fee: \$15.

HBSE 4060. Psycho-social implications of vision loss on people with blindness and visual impairment and their families (2–3)

Dr. Stolarski. HBSE B majors must enroll for 3 points. Introduction to the education of children, youths and adults with blindness and visual impairment and their families; historical aspects; development of professional agencies and services; psychosocial aspects of blindness; problems and issues of the field. Special fee: \$40.

HBSE 4061. Anatomy and physiology of the visual system and related implications (2–3) Dr. Stolarski. HBSE B majors must enroll for 3 points. Structure and function of the human eye; visual perceptual development: anomalies and diseases; functional and traditional methods of vision screening; interpretation of medical reports and records; analysis of environmental factors; utilization of low vision. Observations, simulations, and clinical practice. For special educators, health professionals, and reading specialists. Special fee: \$40.

HBSE 4062. Instruction and curriculum development for infants, children and youth with blindness and visual impairment (2–3)

Dr. Stolarski or Ms. Saunders. Prerequisite: proficiency in translation and transcription of the Braillecode and typing, or HBSE 4063 (may be taken concurrently). Learning theories; programs, methods, materials, and aids in the education of infants, children and youth with blindness and visually impairments. Particular emphasis is placed on the identification of appropriate instructional methods and materials for teaching reading and mathematics to learners with vision loss. Students complete 50 hours, outside of class in observation and clinical practice in assessment, development of instructional objectives, and adaptation of materials. Special fee: \$40.

HBSE 4063. Communication skills for people with blindness and visual impairments—I (3) Dr. Amato or Ms. Boisvert. (First of a two-semester course. Students register for 3 points each term.) Corequisites: HBSE 4060 and HBSE 4061. Research and practice in communication skills and media. Students learn transcription and translation of the Braille-code in the context of development of appropriate curriculum materials and research validated methods of instructing students with vision loss, including methods for teaching and remediating skills in reading and mathematics. Methods for teaching aural and tactile reading are covered extensively. Special fee: \$40.

HBSE 4064. Communication skills for people with blindness and visual impairments—Section 2 (2–3)

Dr. Amato or Ms. Boisvert. (Second of a two-semester course. Students register for 3 points each term.) Prerequisite: HBSE 4063 or Library of Congress Certification in Braille Transcription. Research and practice in communication skills and media. Students learn transcription and translation of the Nemeth code for mathematics in the context of development of appropriate curriculum materials and research validated methods of instructing students with vision loss, including methods for teaching and remediating skills in mathematics and science. Particular emphasis is placed on the creation of instructional materials such as tactile graphs to promote skills acquisition. Special fee: \$40.

HBSE 4070. Psychosocial and cultural aspects of people who are deaf or hard of hearing Section 1, 2 (2)

Dr. Rosen. Introduction to the education of children, youth, and adults who are deaf or hard of hearing; historical development; psychosocial and cultural aspects; problems and issues of the field. Materials fee: \$10.

HBSE 4071. Section 1. Methods of teaching reading and writing to individuals who are deaf or hard of hearing (2–3)

Dr. Berchin Weiss. Study of special methods of teaching in programs for children and youth who are deaf or hard of hearing at nursery, elementary, and secondary levels, with particular attention to the development of language within the language arts subject areas. Materials fee: \$10.

HBSE 4071. Section 2. Language, reading, and writing instruction in the content areas for individuals who are deaf or hard of hearing (2–3)
Ms. Hartman. Study of special methods of teaching in programs for children and youth who are deaf or hard of hearing at nursery, elementary, and secondary levels, with particular attention to the development of language within the academic subject areas. Materials fee: \$10.

HBSE 4072. Development of language of individuals who are deaf or hard of hearing Section 1, 2 (2–3)

Professor Kretschmer. Language development of deaf or hard of hearing individuals at different maturational levels. Prerequisite: HBSE 4079 or equivalent.

HBSE 4073. Teaching of speech to individuals who are deaf or hard of hearing (2–3)

Ms. Rothschild. Development of speech in children who are deaf or hard of hearing, methods of teaching speech to children who are deaf or hard of hearing, development of educational programs for the maximum utilization of residual hearing. Lab required. Materials fee: \$10.

HBSE 4074. Linguistics of American Sign Language (3) Professor Kretschmer. An in depth study of the phonology, morphology, syntax, and pragmatics of American Sign Language. Aspects of the psycho- and socio-linguistics of this language are stressed.

HBSE 4078. Problems in the education of bilingual children who are deaf or hard of hearing (2–3)

Faculty. Introduction to the psychosocial, linguistic, cognitive, and academic effects of bilingualism and techniques for intervention and assessment for the Hispanic child who is deaf or hard of hearing.

HBSE 4079. Language development and habilitation: The foundations (2)

Professor Kretschmer. Course designed to establish a firm foundation in generative syntax, semantics and pragmatics as it relates to language development and habilitation. Materials fee: \$10.

HBSE 4082-I. Assessment and evaluation of infants, children and youth with exceptionalities Section 1 (2–3)

Dr. Stolarski. Enrollment limited to 20 per term. An in-depth study of theoretical principles of measurement, assessment and evaluation necessary for appropriate identification of needs as related to implementation of educational plans for infants, children and youth with disabilities. Applica-

tions of assessment data in instructional programs for children with disabilities, Students complete approximately 50 hours of assessments and evaluations of children with disabilities, as part of the course, through work in the Center for Educational and Psychological Service. Special fee: \$50. Students participate in an additional, weekly lab session. (This course is a prerequisite for HBSE 4300), which is now offered in the spring.

HBSE 4082-II. Practicum in the educational assessment of exceptional children Section 2. (2-3) Supervisors affiliated with CEPS. Permission required. Prerequisite: HBSE 4082. Participation in interdisciplinary, psychoeducational assessment of exceptional children. Analysis of observational and test data; formulation of educational programs for exceptional learners. Conducted in the Center for Educational and Psychological Services (CEPS) or in appropriate community facilities. Course meets the equivalent of one full day a week. Lab fee: \$150. (Plus additional lab time)

HBSE 4083. Theory and techniques for educating infants, children and youth with sensory impairments (2–3)

Dr. Stolarski. Discussion of diagnostic theories for teaching infants, children and vouth with multiple sensory impairments; sensory motor, cognitive, language, and adaptive skills development delays. Particular emphasis is focused on designing curriculum that is applicable and appropriate for promoting literacy, communication and mathematical skills for these unique populations given their mode and codes of learning. Students complete assignments utilizing the various team approaches, including familial involvement. Materials fee: \$30.

HBSE 4085. Assessment and evaluation of bilingual-exceptional children. (3)
Dr. Stolarski. An in-depth study of

Dr. Stolarski. An in-depth study of theoretical principles of measurement, assessment and evaluation necessary for appropriate identification of needs related to implementation of bilingual children and youth who have disabilities. Applications of assessment data in instructional programs for children with disabilities. Students complete approximately 50 hours of assessments and evaluations of bilingual children who have disabilities, as part of coursework, through the Center for Educational and Psychological Services. (This course is a prerequisite for HBSE 4082-II which is offered in the spring).

HBSE 4092. Introduction to foundations of special education opportunity (2–3) Professor Mithaug. Theory and practice in the habilitation and redress of human relationships affecting people with disabilities across the life span. Materials fee:

HBSE 4700-HBSE 4710. Observation and student teaching in special education

Permission required. Course requires 3–5 days a week for participation in community, school, and agency programs and a weekly seminar on campus.

- HBSE 4700 Pre-student teaching (2)
- HBSE 4701-I Mental retardation and intellectual disability (3) (pre-service and first year teachers)
- HBSE 4701-II Mental retardation and intellectual disability (3) (in-service teachers)
- HBSE 4703 Physical disabilities (3)
- HBSE 4704 Behavioral disorders (3)
- HBSE 4706 Blindness and visual impairment (1 or 3) Special fee: \$20
- HBSE 4707-II Deaf and hard of hearing (4)
- HBSE 4709 Habilitation (3)
- HBSE 4710 Mental retardation/sensory impairment (3)
- HBSE 4711 ASL and deaf community and culture (3)

HBSE 4871. American Sign Language I (1-2)

Dr. Rosen. A course designed to develop beginning receptive and expressive skills in American Sign Language.

HBSE 4872. American Sign Language II (2)

Dr. Rosen. A course designed to develop intermediate receptive and expressive skills in American Sign Language HBSE 4880. Opportunities and outcomes for people with disabilities-annual conference (1 or noncredit)

Professor Hickson and Dr. Stolarski. Research conference sponsored by the Center for Opportunities and Outcomes for People with Disabilities provides a forum for the presentation and discussion of research findings by Center researchers and their colleagues from the field.

HBSE 4881. Opportunities and outcomes for people with disabilities-colloquium (0)
Professor Hickson and Dr. Stolarski. Biweekly research colloquia sponsored by the Center for Opportunities and Outcomes for People with Disabilities provides a forum for the presentation and discussion of research findings by Center researchers and their colleagues from the field.

HBSE 4901. Research and independent study: Special Education (1-4)

Faculty. Permission required.

HBSE 5010. Study of the philosophic foundations of special education (3)

Professor Kretschmer. Permission required. For post-master's and advanced master's students in the Department of Health and Behavior Studies in special education. Overview of major philosophic orientation within Social Sciences and Special Education. Special fee: \$10.

HBSE 5040. Behavior analysis: advanced seminar (3) Professor Greer. Permission required. Prerequisites: HBSE 4015 and HBSE 4043. Advanced issues in applied behavior analysis and behaviorism as they relate to special education. Topics and projects involving parent and teacher training, research methodology,

legislation, behavioristic theories.

HBSE 5062. Orientation and mobility (2–3)

Dr. McMahon. HBSE B majors must enroll for 3 points. Principles and practices of orientation and mobility with primary emphasis on training for people with blindness and visual impairments.

Development of self-concept, envi-

ronmental awareness, and orientation to the environment from infancy through adolescence. Study of validated mobility techniques. Practice of techniques under conditions simulating blindness; observations and practice in preparing and presenting material. Materials fee: \$40.

HBSE 5063. Technological aids and assistive devices in the education of toddlers, children and youth with disabilities (2-3) Dr. Stolarski. Technological aids and devices in the education of toddlers, children and youth with disabilities, including those with cognitive based disabilities, sensory impairments, and multiple handicapping conditions. This course is taught as a collaborative effort between TC, Dominican College, the National Center for Disability Services, and the Computer Center for People with Visual Impairments at Baruch College. Field trips, demonstrations, and laboratory sessions. Laboratory fee: \$150.

HBSE 5072. Language and communication for individuals who are deaf or hard of hearing (2) Professor Kretschmer. Communication systems and theories, principles of psycholinguistics applied to language learning in persons who are deaf.

HBSE 5300-HBSE 5314. Advanced practica in special education

Permission required. Guided experiences in selected special education programs for advanced students. Weekly seminar meetings. Supervised group field visits. Preservice internships arranged. Students submit reports analyzing experiences.

- HBSE 5300 General (1–6) Faculty/Staff.
- HBSE 5301 Mental retardation and intellectual disability (1–6)

Professor Hickson.

- HBSE 5303 Physical disabilities (1–6)
 Professor Mithaug or Dr. Stolarski
- HBSE 5304 Behavioral disorders (1–6) Professor Greer.
- HBSE 5306 Blindness and visual impairment (1–6)

- Section 1 Advanced practica in special education: BVI teaching (or HBSE 4706)
- Section 2 Advanced practica in special education: BVI assessment and evaluation (or HBSE 4300 Section 1)Dr. Stolarski.
- HBSE 5307 Deaf and hard of hearing (1–6) Professor Kretschmer.

• HBSE 5309 Habilitation of persons with developmental disabilities (1–6)

Professors Hickson and Mithaug.

• HBSE 5310 Policy and administration (3)

Dr. Kelly. Letter grade (6 credits for full-year continuous enrollment required).

• HBSE 5311 Teacher education (1–6)

Dr. Stolarski.

- HBSE 5312 Research (1–6) Faculty.
- HBSE 5314 Behavior analysis and instruction (1–6) Professor Greer.

HBSE 5901-HBSE 5915. Problems in special education

Permission required. Qualified students work individually or in small groups under guidance on practical research problems. Proposed work must be outlined prior to registration; final written report required.

• HBSE 5901 Mental retardation and intellectual disability (1–4)

Professor Hickson.

• HBSE 5903 Physical disabilities (1–4)

Professor Mithaug or Dr. Stolarski

• HBSE 5904 Behavioral disorders (1–4)

Professor Greer.

- HBSE 5906 Blindness and visual impairment (1–4) Dr. Stolarski. (minimum two semesters, 3 points each term)
- HBSE 5907 Deaf and hard of hearing (1–4) Professor Kretschmer.

• HBSE 5909 Guidance,

habilitation, and career education (1–4)
Professors Hickson and
Mithaug.

• HBSE 5910 Policy and administration (1–4) Professor Mithaug.

DEPARTMENT OF HEALTH AND BEHAVIOR STUDIES

• HBSE 5911 Teacher education (1–4)

Professor Mithaug and Dr. Stolarski.

- HBSE 5912 Research (1–4) Faculty.
- HBSE 5914 Behavior analysis (1-4)

Professor Greer.

• HBSE 5915 Supervision and administration of special education and human resource agencies through organizational behavior analysis (3) Professor Greer.

HBSE 6001. Research in special education (2–4)

Permission required. Prerequisites: HUDM 4122 and HUDM 4123. Instruction in the development, conduct, and reporting of research. Student research studies. All doctoral students in Special Education in Health and Behavior Studies must take all three sections. Students register for Section 2 and Section 3 in the same semester. Special fee: \$30.

- HBSE 6001-I Research and experimental design (2–4) Professor Hickson, Fall.
- HBSE 6001Qualitative approaches, Section 2 (2) Professor Kretschmer, Spring.
- HBSE 6001 Single case studies, Section 3 (2) Professor Greer, Spring.

HBSE 6002. Administration of special education programs (3) Professor Mithaug. For post-master's special educators. Prerequisite: basic courses in school administration and experience in special education. Foundations of leadership and management of special education programs.

HBSE 6003. Teacher education in special education (3)

Dr. Stolarski. Permission required. Open only to advanced students. Organization and development of personnel preparation programs in special education in colleges and agencies. Focus on preservice and continuing professional development programs.

HBSE 6004. Public policy and administration in special education (3)

Professor Mithaug. Provides analytic perspective to assess special education policies and practices

within the social and economic contexts that affect immediate and long-term expectations, opportunities, and outcomes for persons with disabilities.

HBSE 6010. Advanced study of problems and issues in special education (3)

Professor Mithaug. Permission required. Required of doctoral students in Special Education in the Department of Health and Behavior Studies. Design and appraisal of current practices and policies in the education of exceptional children and adults.

HBSE 6015. The verbal behavior model: Individual educational programming (3)
Professor Greer. Prerequisites:
HBSE 4015 and HBSE 4043. Students will master Skinner's model of communicative behavior, the associated literature, and major theoretical papers. Research and data-based schooling applications of the model will be made to pedagogy and curriculum.

HBSE 6070. Psychology of deafness (2)

Professor Kretschmer. Permission required. Effects of deafness on intellectual and personality development. Social psychology of deafness. Implications for education.

HBSE 6400-HBSE 6413. Advanced internships in special education.

Permission required. Post-master's level. Intensive in-service internship at agency chosen to meet individual student's needs. Students submit reports analyzing experiences.

- HBSE 6400 General (1–6) Faculty.
- HBSE 6401 Mental retardation and intellectual disability (1–6)

Professor Hickson.

• HBSE 6403 Physical disabilities (1–6)

Professor Mithaug or Dr. Stolarski.

- HBSE 6404 Behavioral disorders (1–6) Professor Greer.
- HBSE 6406 Blindness and visual impairment (1–6)
 Dr. Stolarski. (minimum two

semesters, 3 points each term)

• HBSE 6407 Deaf and hard of hearing (1–6)

Professor Kretschmer.

• HBSE 6409 Guidance, habilitation, and career education (1–6)

Professors Hickson and Mithaug.

- HBSE 6410 Policy and administration (1–2) Dr. Kelly. (4 credits for full-year continuous enrollment required).
- HBSE 6411 Teacher education (1–6)

Dr. Stolarski.

• HBSE 6412 Research (1–6) Professor Hickson.

HBSE 6500-HBSE 6510. Advanced seminars in special education.

Permission required. For doctoral students in special education and related fields. Recent developments in theory and research as related to the specialization from psychological, educational, sociological, and/or medical sources.

- HBSE 6500 General (3) Faculty.
- HBSE 6501 Mental retardation and intellectual disability (1–3)

Professor Hickson.

• HBSE 6503 Physical disabilities (1–3)

Professor Mithaug or Dr. Stolarski.

• HBSE 6504 Behavioral disorders (3)

Professor Greer.

- HBSE 6506 Blindness and visual impairment (3) Dr. Stolarski. (minimum two semesters, 3 points each term)
- HBSE 6507 Deaf and hard of hearing (2)

Professor Kretschmer.

• HBSE 6509 Guidance, habilitation, and career education (3)

Professor Hickson.

• HBSE 6510 Policy and administration (3) Professor Mithaug.

HBSE 6901. Research and independent study: Special Education (1-4)

Faculty. Permission required.

HBSE 7500. Dissertation seminar in special education (3)
Professor Hickson (Spring). Permission required. Only advanced doctoral students in special education programs are eligible. Prerequisites: HBSE 5010, HBSE 6001, and HBSE 6010. Development of doctoral dissertations and presentation of plans for approval. Special fee: \$10.

HBSE 8901-HBSE 8910. Dissertation advisement in special education (0)

Advisement on doctoral dissertations. Fee: 3 points at current tuition rate for each term. For requirements, see catalog on continuous registration for Ed.D./Ph.D. degrees.

• HBSE 8901 Mental retardation and intellectual disability (1–3)

Professor Hickson.

- HBSE 8903 Physical disabilities (1–3)
- HBSE 8904 Behavioral disorders (1–3)

Professor Greer.

- HBSE 8906 Blindness and visual impairment (1–3) Dr. Stolarski.
- HBSE 8907 Deaf and hard of hearing (1–3)

Professor Kretschmer.

• HBSE 8910 Administration (1–3)

Professor Mithaug.

HBS 5590. Introduction to behavior analysis for applied settings (3)

Professor Greer. Prerequisites: HBSE 4015 and HBSE 4043. Introduction to applied research in education, medicine, and therapy which is characterized by absolute unit measurement, functional relationships between variables, experimentation, and individual subject designs. Writing skills are emphasized. Special fee: \$5.

HBS 6031. Single case experimental design for behavior analysis in education, therapy, and medicine (3)

Professor Greer. Permission required. Topics include inter-subject and intra-subject designs, repeated measurement, generality, relevant statistical techniques, direct and systematic replication, selection of group or single case designs.

Program in the Teaching of American Sign Language (ASL) as a Foreign Language

(Code: TEL) Program Coordinators: Professor Robert E. Kretschmer and Dr. Russell S. Rosen

Degree Offered: Master of Arts (M.A.)

Special Application
Requirements/Information:
The M.A. Program in the
Teaching of American Sign
Language has ongoing admissions, and applications are
received and reviewed throughout the year.

In addition to general College admission requirements, the Program has two additional requirements: demonstrated proficiency in American Sign Language and an interview with the Program coordinators. Proficiency in ASL at the Intermediate-Plus Level is required for graduation; students need to bring documentation such as SCPI and ASLPI. Students who are not proficient in ASL at this level as measured by nationallyrecognized assessments may need to take additional conversational ASL courses. An interview may be scheduled by contacting the Program coordinators.

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

Program Description: The M.A. Program in the Teaching of American Sign Language (ASL) as a Foreign Language provides students with foundations in linguistics and applied linguistics; anthropology; sociolinguistics; social and cognitive psychology; academic assessment, second language instructional design, curriculum development, and assessment; and research methodology, as they pertain to the language, community, and culture of persons who are deaf and the hard of hearing.

ASL is a naturally developing language of deaf and many hard of hearing people in the United States, possessing a linguistic system with its own phonological, morphological, syntactic, and discourse structures that are distinct from English language. ASL users have developed a literary tradition in oratory, folklore, and performance art, all recorded either in print or in permanent media like film and video. The American deaf community of persons, groups, and organizations provides the basis for cultural identity and group cohesion for about one million deaf, hard-of-hearing and hearing individuals, who share a set of characteristics that bind them together, such as knowledge of ASL and traditions for social behavior.

ASL has been afforded the status of a foreign language, and it can be pedagogically approached with individuals unfamiliar with it in a manner similar to other foreign languages. Students in the program will be practiced in curriculum design and execution in general and the curriculum principles found in Modem Languages for Communication as a model.

Students will be prepared to become professionals who approach the profession of teaching ASL as a foreign language in a highly scholarly manner and as a contextualized, investigatory, cultural, and problem-solving event with learners who typically have hearing, are in regular education programs and possess a wide range of cognitive, social, and academic abilities and diverse cultural backgrounds. They will be able to consume, apply, and generate research on the instructional process as presented formally within journals and texts on the teaching of ASL and other second languages, communication skills, deaf studies, curriculum design, and the cognitive, social and affective development of the learner.

Degree Requirements:

The Master of Arts Program in the Teaching of ASL consists of a minimum of 41 credit points distributed in the following manner: 12 points of course work on professional foundations, 24 points of course work and practica experiences in the area of ASL and deaf studies, and 4 credits of electives. For students not proficient in ASL, they will be expected to take additional course work to develop the necessary level of proficiency expected.

M.A. Practica are an integral part of the M.A. degree, and students spend anywhere from 6 to 15 hours per week in teaching time. The students will enroll in two semesters of student teaching and practica experience associated with course work. Students will participate in introductory field observations and student teaching for five days weekly for 12 weeks in each semester.

In addition, the students would need to identify pertinent issues of ASL teaching and/or deaf studies, embark on a review of literature, formulate research questions and hypotheses, conduct data collection and analysis, and prepare an M.A. Project. As for

the final master's research paper, it will be completed during the final student teaching placement. The topics will be decided upon jointly by the student and the Program Coordinators, with input from the master cooperating teacher, and should arise out of some classroom concern.

Students who successfully complete the Master's Program and met all of the requirements for state certification will be recommended to the New York State Education Department for a certification as a Teacher of American Sign Language. They will also be able to obtain a national certificate from the American Sign Language Teachers Association. Those individuals planning to teach in a state other than New York will be helped by the Teachers College Registrar and the Office of Teacher Education to explore certification requirements in and certification reciprocity relationships with other states.

Courses required:

Foundation (12 credits)

Curriculum Design (3):

- C&T 4052 Designing curriculum and instruction, or
- A&HL 4021 Foundations of bilingual and bicultural education, or
- A&HL 4127 Bilingual-bicultural curriculum: multilanguages

Pedagogy (3):

- C&T 4005 Principles of teaching and learning, or
- A&HL 4049 Foreign language teaching: styles and methods

Learner Characteristics (3):

- HBSK 4029 Theories of human cognition and learning, or
- HBSK 4020 Theories of human development, or

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 HBSK 4023 Developmental psychology: adolescence

Anthropological Foundations (3):

- ITSF 4003 American culture and education, or
- ITSF 4010 Cultural and social basis of education, or
- ITSF 5003 Communication and culture, or
- A&HL 4021 Foundations of bilingual and bicultural education

Specialization (18 credits)

Deaf community and culture (6):

- HBSE 4070 Psychosocial and cultural aspects of individuals who are deaf or hard of hearing, Section 1, 2
- HBSE 4075 Selected topics in ASL and deaf community and culture

Language and Communication (6 to 14 credits):

- HBSE 4079 Language development and habilitation: The foundations
- A&HL 4087 Introduction to second language acquisition
- HBSE 4074 Linguistics of American Sign Language

(HBSE 4871-4. American Sign Language, I–IV*)

Curriculum and Instruction (4 credits):

- HBSE 4076 Methods and materials in teaching ASL and Deaf community and culture
- HBSE 4072 Teacher-as-Researcher

Assessment (2):

- HBSE 4307 Assessment in ASL and deaf studies, or
- A&HL 4088 Secondlanguage testing
- *For students without prior signing background.

Student Teaching/Practica (6 credits):

HBSE 4707 Observation and student teaching of ASL, Section 1, 2

Electives (4 credits):

- MSTU 5183 Designing educational video, or
- A&HL 4019 Orality, literacy and technology, or
- A&HL 4050 The study of literature

Courses:

Other courses in the Program are described elsewhere. The following are courses specific to the Program.

HBSE 4075. Selected topics in ASL and deaf community and culture (2)

Dr. Rosen. Literary and artistic works on meaning of deafness, presentations and representations of deafness, American Sign Language, and deaf people in society by individuals who are deaf will be examined. Course studies on the complexities that deaf individuals face in experiencing, living and identifying with, and reflecting on deafness.

HBSE 4076. Methods and materials in teaching ASL and Deaf community and culture (2) Dr. Rosen. Current theories and approaches in curriculum design and instructional methods in second language acquisition and the teaching and learning of American Sign Language and deaf community and culture will be discussed. Materials on American Sign Language and American deaf community and culture will be introduced. Students will develop curriculum and instructional methods to apply current approaches to classroom practice.

HBSE 4307. Assessment of American Sign Language and deaf community and culture (2) Dr. Rosen. Models of assessment of American Sign Language and deaf community and culture will be discussed and evaluated. Students will select appropriate assessment procedures based on reasons for assessment and will construct a complete plan for assessment.

Chair: Professor James E. Corter Location: 453 Grace Dodge Telephone Number: (212) 678-3882 Fax: (212) 678-3837

Programs:

Cognitive Studies in Education Developmental Psychology Measurement, Evaluation, and Statistics

Sociology and Education

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)

Gary Natriello (Sociology and Education)

Aaron M. Pallas (Sociology and 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 Statis-

Linda M. Hirsch (Cognitive Studies in Education)

Associate Professors:

Madhabi Chatterji (Measurement, Evaluation, and Statistics)

James E. Corter (Measurement, Evaluation, and Statistics/Cognitive Studies in Education)

Jane A. Monroe (Measurement, Evaluation, and Statistics)

Adjunct Associate Professors:

Judith Miller (Developmental Psychology)

Elizabeth C. Vozzola (Developmental Psychology)

Bruce L. Wilson (Sociology and Education)

Assistant Professors:

Lawrence T. DeCarlo (Measurement, Evaluation, and Statistics/Cognitive Studies in Education)

Clea Fernandez (Developmental Psychology/Cognitive Studies in Education)

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

Adjunct Assistant Professors:

Ivo Antoniazzi (Measurement, Evaluation, and Statistics) Mervle M. Kaplan (Developmental Psychology) John N. Larson (Cognitive Studies in Education) Lucia F. O'Sullivan (Developmental Psychology)

For information about faculty and their scholarly and research interests, please refer to the "Faculty" section of the Catalog.

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.

Cognitive Studies in Education

Program Coordinator: Professor John B. Black

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.)

Special Application Requirements/Information: GRE general test is required for admission to the doctoral programs.

Program Descriptions:

In the Cognitive Studies in Education Program, 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:

• school systems seeking instructional technology coordinators and teachers

who are knowledgeable about cognitive and developmental theories and research

- publishers and software companies looking for people with knowledge of cognition and development, and experience in instructional design
- research organizations seeking people to conduct basic research and work on instructional applications of computers and related technologies.

For the doctoral programs, work settings after graduation might include: research organizations, or universities seeking faculty in cognitive psychology, educational psychology, educational technology, and reading.

Students in the Cognitive Studies in Education Program begin by taking a set of core background courses, then pursue one of five concentrations: cognition and learning, intelligent technologies, reading research, cognitive studies of educational practice, or psychology of training and performance support in the work place. 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 learn-

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ing, 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 science-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 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 (MSTU). As a culminating experience, masters 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 connections between written and oral language, and between reading and writing skills. Individual differences are also addressed, especially with respect to students with learning disabili-

ties, adult literacy, learning from text and educational policy issues. The culminating experience for masters 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 masters students is an empirical study of cognition in a classroom setting.

Concentration in Psychology of Training and Performance Support in the Work Place:

This concentration prepares students for careers of research and development in training and other related work in business and industry. Students study psychological fundamentals, statistical tools, and instructional technology. Emphasis is on thorough scientific and practical grounding for 1) the design, development, evaluation, and management of instructional programs in industrial and business settings, and/or 2) the development and evaluation of jobrelated documents, manuals and computer programs for use in practical settings. As a culminating experience, masters students will create and evaluate a set of training materials or a performance support system, or conduct a related research study.

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 (3 points):

• HUDK 5324 Research work practicum (1–3) or, by permission, a 6000-level research work practicum

Breadth Requirement (4–6 points):

At least two of the following:

- A&HF 4081 Philosophies of education (3)
- A&HL 4000 Study of language (3)
- BBS 5069 Brain and behavior I and II (1–2 each)
- BBSQ 4040 Speech and language disorders (2–3)
- ITSF 4010 Social context of education (3–4)
- MSTU 4008 Information technology and education (3)
- MSTU 4036 Hypermedia and education (3–4)
- MSTU 4133 Cognition and computers (3)
- ORLJ 4005 Organizational psychology (3)

Specialized Courses (11–13 points): Selected in consultation with an advisor, and focusing on one of

the following concentrations:

Cognition and Learning:

- HUDK 5034 Cognitive research methods and applications (3)
- HUDK 4015 Psychology of thinking (3)
- HUDK 4027 Development of mathematical thinking (3)
- HUDK 5091 Applied psycholinguistics (3)
- HUDK 5024 Language development (2–3)
- 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)
- MSTU 4133 Cognition and computers (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 5091 Applied psycholinguistics (3)
- HUDK 6620 Special topics in developmental psychology (1–3)

- HUDK 6095 Critical review of current journals in psychology (3)
- HBSK 5099 Theories of cognitive processes in writing (3)

Cognitive Studies of Educational Practice:

- HUDF 4021 Sociology of education (3)
- HUDK 4035 Technology and human development (3)
- HUDK 4074 Reading comprehension strategies and study skills (2–3)
- HUDK 4127 Developmental psychology for educational reform (3)
- HUDK 6620 Special topics in developmental psychology (1–3)
- HUDM 5055 Evaluation of institutions, programs, and curricula (3)

Training and Performance in the Workplace:

- HUDF 5020 Methods of social research: Survey methods (3)
- 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)
- HUDM 5055 Evaluation of institutions, programs, and curricula (3)
- MSTU 4133 Cognition and computers (3)
- MSTU 5030 Intelligent computer assisted instruction (3)

Note: At least 2 courses (minimum of 4 points) must be taken outside the department.

Integrative Project: Varies according to selected concentration: Cognition and Learning-an empirical cognitive research study; Intelligent 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; and Training and Performance in the Workplace—creation and evaluation of a set of training materials or performance support system, or a related research study.

Master of Education-60 points

(Code: TKF)

Core Courses (9 points):

- HUDK 4029 Human cognition and learning (3)
- HUDK 4080 Educational psychology (3)
- HUDK 5023 Cognitive development (3)

Statistics/Research Design (12+ points):

- HUD 4120 Methods of empirical research (3)
- HUDM 4120 Basic concepts in statistics (3) (if no undergraduate statistics)
- HUDM 4122 Probability and statistical inference (3)
- HUDM 5059 Psychological measurement (3)
- HUDM 5122 Applied regression analysis (3)

Research (6 points):

• HUDK 5324 Research work practicum (1–6) or, by permission, a 6000-level research work practicum.

Breadth Requirement (6 points): At least two of the following:

- A&HF 4081 Philosophies of education (3)
- A&HL 4000 Study of language (3)
- BBS 5069 Brain and behavior I and II (1–2 each)

- BBSQ 4040 Speech and language disorders (2–3)
- ITSF 4010 Social context of education (3–4)
- MSTU 4008 Information technology and education (3)
- MSTU 4036 Hypermedia and education (3–4)
- MSTU 4133 Cognition and computers (3)
- 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 5034 Cognitive research methods and applications (3)
- HUDK 4015 Psychology of thinking (3)
- HUDK 4027 Development of mathematical thinking (3)
- HUDK 5091 Applied psycholinguistics (3)
- HUDK 5024 Language development (2–3)
- 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)
- MSTU 4133 Cognition and computers (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 5091 Applied psycholinguistics (3)
- HUDK 6620 Special topics in developmental psychology (1–3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HBSK 5099 Theories of cognitive processes in writing (3)

Cognitive Studies of Educational Practice:

- HUDF 4021 Sociology of education (3)
- HUDK 4035 Technology and human development (3)
- HUDK 4074 Reading comprehension strategies and study skills (2–3)
- HUDK 4127 Developmental psychology for educational reform (3)
- HUDK 6620 Special topics in developmental psychology (1–3)
- HUDM 5055 Evaluation of institutions, programs, and curricula (3)

Training and Performance in the Workplace:

- HUDF 5020 Methods of social research: Survey methods (3)
- 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)
- HUDM 5055 Evaluation of institutions, programs, and curricula (3)
- MSTU 4133 Cognition and computers (3)

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 MSTU 5030 Intelligent computer assisted instruction
 (3)

Note: At least 2 courses (minimum of 4 points) must be taken outside the department.

Integrative Project: Varies according to selected concentration: Cognition and Learning-an empirical cognitive research study; Intelligent 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; and Training and Performance in the Workplace-creation and evaluation of a set of training materials or performance support system, or a related research study.

Doctor of Philosophy-75 points

(Code: TKE)

General Psychology (12 points): One course each in 4 of the following areas:

- 1. Development:
 - HUDK 5022 Emotional development (3)
 - HUDK 5023 Cognitive development (3)
 - HUDK 5024 Language development (3)
 - HUDK 5029 Personality development and socialization across the life span (2–3)
- 2. Personality:
 - CCPX 5032 Personality and psychopathology (3)
 - CCPX 5034 Developmental psychopathology (3)
 - G 4003 Personality (3)
- 3. Social Bases of Behavior:
 - ORLJ 5540 Proseminar in social psychology (3)
 - G 4006 Social psychology (3)

- 4. Measurement:
 - HUDM 5059 Psychological measurement (3)
- 5. Biological Bases of Behavior:
 - BBS 4043 Human nervous system (3)
 - BBS 5068 Brain and behavior I and II (1–2 each)
 - HBSK 5070 Neural bases of language and cognitive development (3)
 - G 4004 Physiological psychology (3)

Statistical and Research Methodology (15 points):

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5059 Psychological measurement (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6122 Multivariate analysis I (3)

Core Courses (minimum of 18 points):

At least 6 of the following:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4027 Development of mathematical thinking (3)
- HUDK 4029 Human cognition and learning (3)
- HUDK 4080 Educational psychology (3)
- HUDK 5023 Cognitive development (3)
- HUDK 5034 Cognitive research methods and applications (3)
- HUDK 5197 Psychology of training in business and industry (3)
- HUDK 5198 Psychology of instructional systems design (2–3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HUDK 5090 Psychology of language and reading (2–3)
- MSTU 4133 Cognition and computers (3)

Research Apprenticeship (6 points):

Two semesters in a research practicum:

- HUDK 5324 Research work practicum (1–3)
- HUDK 6539 Research practicum in educational psychology, cognition, and learning (1–3)
- HUDK 6592 Advanced research seminar: learning and instruction (3)
- HUDK 6598 Advanced research seminar: instructional theory (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)

Non-departmental Courses (minimum of 8 points):

At least 3 courses outside the department are selected in consultation with an advisor.

Additional Requirements: Two papers, one in theory and application, another in empirical research; certification examination; and an approved dissertation.

Doctor of Education-90 points

(Code: TKE)

General Psychology (12 points): One course each in 4 of the following areas:

- 1. Development:
 - HUDK 5022 Emotional development (3)
 - HUDK 5023 Cognitive development (3)
 - HUDK 5024 Language development (3)
 - HUDK 5029 Personality development and socialization across the life span (2–3)

- 2. Personality:
 - CCPX 5032 Personality and psychopathology (3)
 - CCPX 5034 Developmental psychopathology (3)
 - G 4003 Personality (3)
- 3. Social Bases of Behavior:
 - ORLJ 5540 Proseminar in social psychology (3)
 - G 4006 Social psychology (3)
- 4. Measurement:
 - HUDM 5059 Psychological measurement (3)
- 5. Biological Bases of Behavior:
 - BBS 4043 Human nervous system (3)
 - BBS 5068 Brain and behavior I and II (1–2 each)
 - HBSK 5070 Neural bases of language and cognitive development (3)
 - G 4004 Physiological psychology (3)

Statistical and Research Methodology (15 points):

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5059 Psychological measurement (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6122 Multivariate analysis I (3)

Core Courses (minimum of 24 points):

At least 8 of the following:

- HUDK 4015 Psychology of thinking (3)
- HUDK 4027 Development of mathematical thinking (3)
- HUDK 4029 Human cognition and learning (3)
- HUDK 4080 Educational psychology (3)
- HUDK 5023 Cognitive development (3)
- HUDK 5034 Cognitive research methods and applications (3)

- HUDK 5197 Psychology of training in business and industry (3)
- HUDK 5198 Psychology of instructional systems design (2–3)
- HUDK 6095 Critical review of current journals in psychology (3)
- HUDK 5090 Psychology of language and reading (2–3)
- MSTU 4133 Cognition and computers (3)

Research Apprenticeship (6 points): Two semesters in a research practicum:

- HUDK 5324 Research work practicum (1–3)
- HUDK 6539 Research practicum in educational psychology, cognition, and learning (1–3)
- HUDK 6592 Advanced research seminar: learning and instruction (3)
- HUDK 6598 Advanced research seminar: instructional theory (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)

Non-departmental Courses (minimum of 8 points): At least 3 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.

Courses:

Basic and General Courses

HUDK 4010. Psychology of reading (3)
Professor Williams. Exploration of theoretical models and critical empirical issues pertaining to

those language processes inherent in reading and in writing. Analysis of instructional strategies in terms of cognitive models.

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 (3)

Professor Black. 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)

Professor Black. 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)

Faculty. 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 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 computer-assisted 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 5091. Applied psycholinguistics (3)

Professor Williams. Permission required. Prerequisite: HUDK 5090 or equivalent. Guided research in psycholinguistics with emphasis on studies relating language to cognitive processes, school learning, and social processes.

HUDK 6095. Critical review of current journals in psychology

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 peerreviewed journals.

HBSK 5096. The psychology of memory (3)

Professor Peverly. An analysis of perspectives on human memory with particular attention to knowledge, attention, strategic processes, metacognition, transfer, and context. The application of this information to practice is stressed.

MSTU 4133-4134. Cognition and computers

Professor Black. 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: \$25. MSTU 4134. Cognition and computers lab (1–3) Permission required. Corequisite: MSTU 4133. Special fee: \$25.

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.

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HUDK 5080. Reading comprehension (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 business 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)

Dr. Larson. Enrollment limited. Systematic approaches to instructional design in schools and corporate settings. Theoretical and empirical bases. Analysis of casebased examples. Materials fee: \$25.

HUDK 5324. Research work practicum (1–3)

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 6595. Seminar in language and reading (3) Professor Williams. Permission required. Analysis of current research and theory in the study of language and reading.

HUDK 6598. Advanced research seminar: Instructional theory (2–3)

Faculty. Permission required. Limited to doctoral candidates. Advanced topics in the systematic management of instruction, the development of instructional materials and devices, and their relationship to learning, memory, and cognition.

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.

HBSK 4074. Reading comprehension strategies and study skills (2–3)

Professor Peverly. Reading and study skills: Practical procedures based on research findings appropriate for teachers, counselors, and others. For students at late elementary levels through young adulthood. Materials fee: \$25.

HBSK 4077. Adult basic literacy (2–3)

Faculty. Psychological and educational aspects of adult basic literacy for teachers, counselors, and others who work with adults deficient in basic reading and writing skills.

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); and 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:

Program in Applied Linguistics:

• A&H 4000 Study of language (2–3)

Program in School Psychology:

- HBSK 4074 Reading comprehension strategies and study skills (2–3)
- HBSK 4077 Adult basic literacy (2–3)
- HBSK 5096 The psychology of memory (3)

Program in Instructional Technology and Media:

- MSTU 4008 Information technology and education (3)
- MSTU 4080 Television and video applications in education (3)
- MSTU 4083 Instructional design of educational technology (3)
- MSTU 4085 New technologies for learning (2–3)
- MSTU 5030 Intelligent computer-assisted instruction (3)
- MSTU 5191-5192 Educational video production I and II (3–4)
- MSTU 5194 Models of interactive learning (3–4)
- MSTU 6030 Software evaluation (3)

Psychology: Developmental

(Code: TKA)

Program Coordinator: Professor Herbert P. Ginsburg

Degree Offered: Master of Arts (M.A.)

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.

Program Description:

The Master of Arts in developmental psychology typically requires completion of 32 points, normally achieved in 12 months of full-time study or proportionately longer for parttime 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. Opportu-

nity exists for the study of deviant as well as normal psychological functioning within a developmental framework.

Students may register for independent study in order to undertake theoretical or empirical research projects or fieldwork. Students whose goal is to acquire professional skills in clinical or counseling psychology may enroll in introductory course offerings, which in many cases can be applicable if the student is later admitted to one of the more advanced master's or doctoral programs in these areas.

In order to accommodate the diverse aims of individual students, a considerable degree of flexibility has been built into the course of study leading to the M.A. degree. An attempt has been made to minimize specific course requirements, and the student will find that there is a good deal of freedom to choose from among the many offerings provided by Teachers College and the Columbia University Graduate Faculties. In consultation with an advisor, students may create an individually tailored program of study, or may enter a concentration in Developmental Studies for Educators, or Risk, Resilience, and Prevention.

The course of study has three main components:

- A basic course in methods of research.
- Required courses in cognitive development, personality development in atypical populations, and developmental psychology and education.
- Electives in developmental psychology plus relevant electives offered by other Teachers College and Columbia University programs.

Students completing the M.A. degree accept positions in research laboratories or field settings, in biomedical institutions, in educational, community, and child care agencies, and as instructors in community colleges, or go on to pursue more advanced degrees in particular areas of specialization.

Degree Requirements:

Master of Arts

32 points and a special project.

Basic Courses (12 points):

- HUD 4120 Methods of empirical research (3)
- HUDK 5023 Cognitive development (3)
- HUDK 5121 Personality development and socialization in early childhood (3)

And either of the following:

- HUDK 5040 Development and psychopathology: Atypical contexts and populations
 (3)
- HUDK 4127 Developmental psychology for educational reform (3)

Elective Courses (minimum of 6 points):

At least 3 other psychology courses (2 or 3 points each), 2 or 3 of which must be in developmental psychology.

Breadth Requirement (minimum of 6 points):

Three courses taken for either 2 or 3 points each, including:

• HUDM 4120 Basic concepts in statistics (3) or equivalent; and at least 2 courses in programs at Teachers College other than Developmental Psychology.

Research Requirement (3 points):

• HUDK 5324 Research work practicum (3)

Concentrations: Within the constraints described above, the student may design a program of study in coordination with an advisor, or concentrate in Risk, Resilience, and Prevention (in collaboration with the programs in Clinical Psychology and School Psychology); Developmental Studies for Educators (in collaboration with the programs in Cognitive Studies in Education and Curriculum and Teaching).

Developmental Psychology

(Code: TKD)

Program Coordinator: Professor Herbert P. Ginsburg

Degree Offered: Doctor of Philosophy (Ph.D.)

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 credits per semester, is required.

Program Description:

The 75–point doctoral degree prepares students for faculty positions in colleges and universities, and for positions as associates and consultants in research laboratories, biomedical schools, and other applied

settings. 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 which 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

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by the graduate faculty of the 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.

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 proseminar.
- Methodology. All students are required to at least take 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—HUD 4120 Methods of empirical research (3); HUDK 5023 Cognitive development

(3); HUDK 5029 Personality development and socialization across the life span (2-3); and HUDK 5040 Development and psychopathology: Atypical contexts and populations (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 courses. 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 enrollment in HUDK 6901 Advanced research (1-3), and independent study in developmental psychology); service as a teaching assistant for two masters-level developmental psychology courses, 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 HUDM 6123 Multivariate analysis II (3). Other requirements include an approved theoretical paper (concomitant with enrollment in HUDK 6901 Advanced research (1–3), and independent study in devel-

opmental 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 15 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) Faculty. Review of research and theory in early perceptual, cognitive, and social/emotional development, with particular attention to the interaction of biological and environmental factors in early life.

HUDK 4022. Developmental psychology: Childhood (2–3) Faculty. Children's cognition, perception, representation, language, affect, personality, and sexuality. Family structure and school as they influence these aspects of childhood.

HUDK 4023. Developmental psychology: Adolescence (2–3) Faculty. 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)

Faculty. 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 4045. Cross-cultural psychology of teaching and learning: An in-depth look at Japan (2–3)

Professor Fernandez. Explores the value of cross-cultural comparisons for thinking about teaching and learning. A case study approach is used to examine work comparing education in Japan and the US.

HUDK 4127. Developmental psychology for educational reform (3)

Professor Ginsburg. Attempts to utilize developmental theories and research in the improvement of education are examined critically.

HUDK 4620. Departmental colloquium (2–3)

Presentation and discussion of research topics by faculty, visiting psychologists, and students.

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)

Faculty. 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)

Faculty. 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)

Faculty. Theory and research regarding the interaction between naturally developing personality structures and socialization processes throughout life.

HUDK 5036. Child and adolescent development and social policy (2–3)

Professor Brooks-Gunn. This course provides a foundation of knowledge concerning the role of child and adolescent development perspectives in informing social policy. Students will investigate policy issues related to: poverty, families, child care, and education.

HUDK 5040. Development and psychopathology: Atypical contexts and populations (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 5092. Sociocultural factors in psychological development (3)

Faculty. This course examines the impact of ethnic culture, religion, economics, education, and gender and sexuality on the process of psychological development.

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) Professor Fernandez. 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 5128. Social-cognitive development (2–3)

Faculty. Permission required. Developmental theory and research on the relation between individual consciousness and the symbolic order of society. Topics include: the "self" the "other", intersubjectivity, social perception, communication, metaphor, myth, stories, and media images.

HUDK 5130-HUDK 5131. Community research practicum (3 each)

Faculty. Supervised experience in various types of community agencies (i.e., schools, hospitals, clinics) with a focus on developing research skills. Integration of theoretical and observational knowledge will be stressed. Open to degree candidates in Developmental Psychology.

HUDK 5523. Seminar in adolescent development and developmental problems (3) Professor Luthar. Permission

required. Prerequisite: HUDK 4023. Seminar designed to examine theory, research, and practice perspectives related to social and emotional domains during the period of adolescence.

HUDK 5324. Research work practicum (2–3)

Faculty. Students learn research skills by participating actively in an ongoing faculty research project.

HUDK 6010. Developmental research methods (3)

Professor Kuhn. Advanced survey of both new and classical methods for conducting research designed to answer developmental questions.

HUDK 6036-HUDK 6037. Child and family policy (2–3 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 multidisciplinary 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 crosscultural developmental psychology (2–3)

Professor Fernandez. 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 6572. Seminar in the psychology of education (2–3) Professor Ginsburg. Permission required. Students participate in ongoing research.

HUDK 6620. Special topics in developmental psychology (1–3) 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)

Permission required.

HUDK 6901. Advanced research and independent study (1–3 each course) 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 catalog section on Continuous Registration for Ed.D./Ph.D. degrees.

Measurement, Evaluation, and Statistics

Program Coordinators: Professors Jane A. Monroe (Applied Statistics) and Lawrence T. DeCarlo (Measurement and Evaluation)

Applied Statistics

(Code: TMX)

Degree Offered: Master of Science (M.S.)

Special Application Requirements/Information: GRE General Test is required for the M.S. in Applied Statistics. Background in calculus is also required.

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.

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 6122 Multivariate analysis I (3)
- HUDM 6123 Multivariate analysis II (3)
- HUDM 6030 Multilevel and longitudinal data analysis (3)
- HUDM 6055 Latent structure analysis (3)
- W 4105 Probability (3); and W 4107 Statistical inference (3) 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.

Distribution Requirement: At least 2 courses (for a minimum of 2 points each) must be taken at Teachers College from

Culminating Experience: Special project.

Measurement and Evaluation

outside the department.

(Code: TMM)

Degrees Offered:
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

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.

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, departments of education, and licensure and certification boards. The Ph.D. is appropriate for individuals with strong quantitative and technical skills who wish to focus on theoretical issues in measurement and evaluation, or who have a strong background in a substantive area of psychology in which they wish to further the development and application of measurement techniques.

The Ed.D. is appropriate for individuals who wish to focus on the application of measurement and evaluation techniques in education, psychology, and business and industry. Both doctoral degrees are accepted as qualification for faculty positions in Schools of Education in the United States.

Degree Requirements:

Master of Education-60 points

Measurement and Evaluation Core (18 points):

- HUDM 5059 Psychological measurement (3)
- HUDM 5055-5056 Evaluation of institutions, programs, and curricula I and II (3 each)
- HUDM 6051-6052 Psychometric theory I and II (3 each)
- HUDM 6055 Latent structure analysis (3)

Quantitative Methods (15 points):

- HUDM 4122 Probability and statistical inference (3)
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6030 Multilevel and longitudinal data analysis (3)
- HUDM 6122 Multivariate analysis I (3)

Psychology (12 points): Taken in one or more of the following areas: Developmental psychology, cognitive studies, counseling psychology, organizational psychology, or social psychology.

Research Methods (6 points):

- HUD 4120 Methods of empirical research (3)
- HUDM 5250 Research practicum in measurement and evaluation (0–4)

Other Aspects in Education (6–9 points):

One course in foundations of education; and 2 courses in curriculum and teaching and/or educational administration.

Electives:

Chosen in consultation with an advisor and designed to strengthen and broaden the student's professional preparation.

Culminating Experience: An evaluation project.

Doctor of Philosophy-75 points

Measurement and Evaluation Core (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 5055-5056 Evaluation of institutions, programs, and curricula I and II (3 each)
- HUDM 5058 Choice and decision making (3)
- HUDM 5053 Instrument design and validation (3)
- CCPJ 5062 Career counseling and development (2–3)

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)
- Also W4105 Probability (3); and W4107 Statistical inference (3), 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 administration 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.

Doctor of Education-90 points

Measurement and Evaluation Core (24 points):

- HUDM 5059 Psychological measurement (3)
- HUDM 5055-5056 Evaluation of institutions, programs, and curricula I and II (3 each)
- 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 5058 Choice and decision making (3)
- HUDM 5053 Instrument design and validation (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 inference (3)

- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 5124 Multidimensional scaling and clustering (3)
- HUDM 6026 Statistical treatment of mass data (3)
- HUDM 6122-6123 Multivariate statistics I and II (3 each)
- HUDM 7500 Dissertation seminar (1–3 each for two semesters)
- HUDM 8900 Dissertation advisement (0)

Psychology (minimum of 18 points):

In consultation with an advisor, a group of courses aimed at substantive preparation in the field of psychology.

Related Courses (minimum of 6 points):

Selected 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; 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 programs in psy-

chology, 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 Chatterji and DeCarlo. General issues of reliability, validity, norms, etc. Techniques of appraising aptitude, achievement, personality; teacher-made tests; standardized tests in selection, pupil classification, guidance.

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 (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

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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. Critical examination of basic issues in assessing psychological characteristics. Validity, reliability, units of measurement; theories of aptitude and intelligence; use of multiple measures in prediction and diagnosis.

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 5550. Current issues in measurement and evaluation (3) Faculty. Prerequisites: HUDM 6051 and HUDM 6122. Selected topics of current interest to measurement theory or practice examined in depth.

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, multilevel 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)

Faculty. 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. Prerequisite: 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, polynomial regression models, with grouping variables including one-way ANOVA, two-way ANOVA, and analysis of covariance. Lab devoted to applications of SPSS regression program. Lab fee: \$50.

HUDM 5123. Linear models and experimental design (3) Faculty. Prerequisite: HUDM 5122. Analysis of variance models including within subject designs, mixed models, blocking, Latin Square, path analysis, and models with categorical dependent vari-

ables. Lab devoted to computer applications. Lab fee: \$75.

HUDM 5124. Multidimensional scaling and clustering (3)
Professor Corter. Permission required. Prerequisites: HUDM 4122 and HUDM 5122 or equivalent. Methods of analyzing proximity data (similarities, correlations, etc.), including multidimensional scaling, which represents similarities among items by plotting the items into a geometric space, and cluster analysis for grouping items.

HUDM 6026. Statistical treatment of mass data (3)
Professors 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)

Professor Monroe. Permission required. Prerequisite: HUDM 5122 or equivalent; HUDM 5123 recommended. An introduction to multivariate statistical analysis, including matrix algebra, general linear hypothesis and application, profile analysis, principal components analysis, discriminant analysis, 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, and factor 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

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 and Education

(Code: TFS)

Program Coordinator: Professor Aaron M. Pallas

Degrees offered: Master of Arts (M.A.)

Master of Education (Ed.M) Doctor of Education (Ed.D.) Doctor of Philosophy (Ph.D.) Educational Policy (option available)

Special Application Requirements/Information: The GRE general is required for all doctoral applicants, and

for all doctoral applicants, and doctoral applications are reviewed for Fall term only.

Program Description:

The sociological inquiry 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 sociology of education generally, but also in online education, organizational studies, family and community education, stratification, racial issues, and urban sociology. 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 specialization in Educational Policy for students in the M.A. and Ed.M. programs.

Degree Programs

The Graduate Program in Sociology and Education offers four degree programs, the M.A., the M.Ed., the Ph.D., and the Ed.D. Each program is designed to meet the needs of students

with a particular combination of prior experience and career objectives. The M.A., M.Ed., 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 professional 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 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 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 the Graduate School of Arts and Sciences. Because this program requires full-time study, students should give careful consideration to the financial resources required to complete this degree. 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 parttime 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.

Degree Requirements:

Master of Arts–32 points Master of Education–60 points

Sociology Core (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 education (3)
- 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 4033 School improvement in the inner city: A sociological view (2–3)
- HUDF 5023 The family as educator (3)
- HUDF 5026 The family and television (3)
- HUDF 5120 Education in community settings (1–2)
- HUDF 5621 Technology and society (3)
- HUDF 6525 Seminar in sociology of education (1–3)

Research Methods (6 points):

- HUDM 4122 Probability and statistical inference (3)
- An approved course in qualitative methods
- M.Ed. 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)

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Colloquia (3 points):

- HUDF 4620 Introductory colloquium in sociology and education (1–3), or
- HUDF 5100 Supervised research and practice (1–6)

Electives (3–5 points): Selected in consultation with an advisor. (M.Ed. 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)

Doctor of Philosophy-75 points

All Ph.D. student programs generally follow the requirements for the Ph.D. in sociology for the first two years of study followed by specialized student in the sociology of education. Specific course plans are developed in consultation with an advisor.

Doctor of Education-90 points

Course plans are developed in consultation with an advisor.

Ed.D. students work with an advisor to develop an interdisciplinary program for study with a specialization in the sociology of education.

Educational Policy Option HUDF 4000 Education and public policy (3) HUDF 5645 Policy seminar I (3) HUDF 5646 Policy seminar II (3) HUDF 5430 Internship (1–6)

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 school systems, schools, and students.

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 (3)

Professor Pallas. Sociologists define the life course of individuals by when, and in what order, people assume key social roles, such as becoming an adult, or moving from the workforce to retirement. This course looks at the sociology of the life course, focusing on how historical and societal factors combine with the personal characteristics of individuals to produce unique life course patterns.

HUDF 4029. Sociology of schools (3)

Professor Natriello. An examination of sociological research on the structure and operation of schools. Particular attention to the processes of socialization, stratification, and legitimation as well as social organization and the sociology of school curriculum.

HUDF 4030. Sociology of educational processes in formal organizations (3)

Professor Natriello. 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)

Faculty. 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 4033. School improvement in the inner city: A sociological view (2–3)

Faculty. A sociological examination of effective inner-city school reforms via lectures, readings, and field visits.

HUDF 4620. Introductory colloquium in sociology of education (1–3)

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) Faculty. Relationship between research problem and study design, choice of population, sampling methods, instrument construction, interviewing, data processing, and analysis.

HUDF 5021. Methods of social research: Evaluation methods

Faculty. Introduction to the principles of program evaluation. The course addresses the what, how (quantitative and qualitative), and why of evaluation. Through a blend of theoretical and case study examples, students will actively engage a wide range of issues and become informed consumers of program evaluations.

HUDF 5022. Sociological analysis of educational systems (2–3) Professor Natriello. Analysis of local and national education systems through application and adaptation of organization theory, with special attention to problems of innovation.

or equivalent

HUDF 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.

HUDF 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.

HUDF 5028. School dropouts and educational policy (3)
Professor Pallas. A consideration of a variety of issues associated with the phenomenon of school dropouts. Topics include measuring dropouts and dropout rates, the causes and consequences of dropping out of school, what works in dropout prevention, and educational policy and school dropouts.

HUDF 5029. Sociological research methods in educational settings (3)

Faculty. Methods for the analysis of quantitative data and hypothesis testing. Use of SPSS computer program for cross-tabulation, correlation, and multiple regression.

HUDF 5030. Sociological theories of education (3)

Faculty. Prerequisite: one sociology of education course or consent of the instructor. An intensive analysis of the major theoretical writings of functionalist, Marxist, Weberian, and feminist scholars.

HUDF 5120-HUDF 5123. Education in community settings Professor Leichter. Permission required. A review and analysis of educational issues and opportunities in various community settings. Students may elect to take one or more for 1–2 points each. Special fee: \$5.

- HUDF 5120. Museums (1–2)
- HUDF 5121. Community centers (1–2)
- HUDF 5122. Correctional institutions (1–2)

• HUDF 5123. Outdoor educational programs (1–2)

HUDF 5430. Internship (1–6) Permission required. Supervised experience in diverse settings designed to develop skills in policy-related research, development, planning, and evaluation.

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-HUDF 5646. Policy seminar (3 each)

Faculty. An examination of policy formation, analysis, implementation, and evaluation in education.

HUDF 6021. Social research methods: reporting (1–2) Faculty. Student teams will analyze data and write a social science article.

HUDF 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.

HUDF 6525. Seminar in sociology of education (1–3) Faculty. A seminar for doctoral

Faculty. A seminar for doctoral students to further their professional development and to prepare for doctoral research.

HUDF 6534. Sociological theory in educational research (3) Professor Natriello. Application of sociological theories to educational research and development within a variety of institutions.

Individualized Studies

HUDF 4903. Research and independent study (1–3) Permission required.

HUDF 5100. Supervised research and practice (1–6) Professor Wells.

HUDF 6200. Field research outside the United States (0)
Faculty. Permission required.
Required of doctoral students
when choice of doctoral research
necessitates data generation in
other countries. One year of field
experience under supervision in
approved geographical and institutional site. Students secure
approval of department chair and
principal advisor in advance, and
render periodic reports.

HUDF 6903. Research and independent study (1–3) Permission required.

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 Continuous 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.

HUDF 6920. Studies in sociology and education (1–15)

Chair: Professor Hervé Varenne Location: 375 Dodge Hall Telephone Number: 678-3947 Fax: 212-678-8237 Email: hbv1@columbia.edu

Programs:

Anthropology and Education Applied Anthropology Comparative and International Education International Educational Development Bilingual/Bicultural Education Economics and Education

Faculty:

Professors:

Thomas R. Bailey George C. Bond Lambros Comitas Charles C. Harrington Hope Jensen Leichter Henry Levin Francisco Rivera-Batiz Mun C. Tsang Hervé Varenne

Associate Professors:

Jo Anne Kleifgen Gita Steiner-Khamsi Maria Emilia Torres-Guzman

Assistant Professors:

Frances Vavrus Lesley Bartlett

Adjunct Professors:

Erwin Flaxman Joseph Paul Martin Betty A. Reardon

Adjunct Associate Professor:

Dale T. Snauwaert

Adjunct Assistant Professor:

Marion Boultbee

Instructor:

Eric Larsen

Lecturer:

Peter Lucas

Departmental mission:

In recognition of the interconnectedness of all human beings around the globe, Teachers College has strengthened its long-standing commitment to the international arena. It has dedicated 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 21st century will bring to cities and countries around the world.

International and transcultural forces will be increasingly present in all societies, and these forces will be crucial in understanding education in every domain of human experience—family, community, school, the workplace. In all these domains, people will be educated to participate in a world that is increasingly international and transcultural.

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, among others, AIDS education, civic education, drugs and society, privatization of education, etc. Students can concentrate within the department in such areas as African education; family and community education; language, literacy, and 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 provide regional concentrations (e.g., 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.

A Certificate of Attendance in Multicultural Education is also offered to students in any of the Department's programs. Students interested in the Certificate must complete four courses including participation in the Advanced Seminar in Multicultural Studies (IND 5510).

Courses:

IND 5510. Advanced seminar in multicultural education (3) Professor Flaxman. An intensive examination of the multicultural, social, and personal self and identity in several works of the imagination, psychology, and the social sciences.

Comparative and International Education

(Code: TFI) Program Coordinator: Professor Jo Anne Kleifgen

International Educational Development

(Code: TFZ) Program Coordinator: Professor Mun C. Tsang

Degrees offered:
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
[Code: TFZ only]
Doctor of Philosophy (Ph.D.)
[Code: TFI only]

Special Application
Requirements/Information:
Applicants to the masters and doctoral degree programs in
Comparative and International
Education must indicate an academic discipline and a geographical area of specialty on their application for admission on the line where they indicate their choice of program. See "Program Description" below for academic discipline and geographical area choices.

Students seeking masters and doctoral degrees in the International Educational Development program select an academic or professional field of interest and either a transcultural or geographical area of study. They should indicate tentative areas of interest on their application for admission. See "Program Description" below for academic discipline and geographical area choices.

Doctoral applicants must submit an academic writing sample and should arrange if possible for an interview prior to applying. A social science educational background is preferred for those who wish to be considered for the Ph.D. program in Comparative and International Education.

Program Description:

In 1899, Teachers College became the first graduate institution in the United States to develop a program in comparative and international studies in education. The Program faculty were co-founders of the Comparative and International Education Society in 1954 and edited the Society's journal, *Comparative Education Review*, for many years.

From 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 continues to be active in conducting research or participating in educational activities around the world. The programs, in addition to the Institute for International Studies, play dominant roles in international activities and research at Teachers College.

The programs in Comparative and International Education and International Educational Development 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.

Graduates of the programs are found in numerous educational positions including academic research and teaching, in educational planning, implementation, and evaluation roles in foundations, non-governmental organizations, governmental institutions, businesses and corporations, and private and public educational institutions.

Comparative and International Education

Students in this program select an academic discipline and a geographical area of specialty for master's and doctoral degrees. Within the department, the program offers academic disciplinary concentrations in anthropology and economics, and the following geographical areas of study: Africa, the Caribbean, Eastern Europe, Russia, the Middle East, East Asia and South Asia, and South America.

In conjunction with, but outside the department, degree concentrations are offered in History, Organizational and Social Psychology, Philosophy, Political Science, Religion and Sociology.

International Educational Development

Students seeking masters and doctoral degrees in the International Educational Development program select an academic or professional field of interest and either a transcultural or geographical area of study. Several academic and professional areas of concentration are offered, including African education, Bilingual/bicultural Education, Family and Community Education, Finance and Planning, Language, Literacy and Technology, and Peace Education.

In conjunction with, but outside the department, concentrations are offered in:

- Adult Learning
- Communication (computing and technology)
- Conflict Resolution
- Curriculum and Teaching
- Education Leadership
- Health Education
- Higher Education
- Mathematics Education
- Policy Studies
- Science Education
- TESOL

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. Students are encouraged to consult with one of the faculty members affiliated with the concentration to select courses from other departments at Teachers College as well as from other programs at Columbia University.

Family and Community Education Teachers College continues its long history of groundbreaking work through the concentration in Family and Community Education. In this concentration a founding premise concerning educational configurations is central.

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 drasticallyas 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.

The concentration offers courses for those in the various majors within the department, as well as those from other departments of Teachers College, Columbia University, Union Theological Seminary, and Jewish Theological Seminary who feel their future work will benefit from new perspectives on families and communities.

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. Frameworks for these courses are interdisciplinary, drawing upon concepts from the social sciences and the humanities.

Those who specialize in Family and Community Education will design their programs of study from the courses in Family and Community Education listed below. In consultation with an advisor they may also select courses from other departments in Teachers College, as well as from elsewhere in Columbia University. Opportunities are available for individually designed programs of study and research.

Finance and Planning The Finance and Planning concentration is devoted to the preparation of researchers, policy analysts, as well as managers and leaders in the financing and planning of education. The courses are designed to examine issues and topics central to the financing and planning of education at various levels across countries today and in the new century. These issues and topics include: financing quality basic education for all, equity and efficiency in financing, highereducation 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 financ-

This 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 nonprofit and community organizations. In addition to courses listed below, students can select relevant courses from departments such as Organization and Leadership, Arts and Humanities, as well as from the larger university.

ing and planning.

Language, Literacy, and Technology
In response to new media that
are fostering alternative forms
of global communication, the
department has developed a
concentration in Language,
Literacy, and Technology that
explores the relations between
traditional forms of communication and the newly emergent
ones. In addition to the
courses listed below, students
can select relevant courses
from departments such as
Mathematics, Science, and

Technology and Arts and Humanities as well as from the larger university.

Peace Education

In recognition of the unprecedented dimensions and overriding significance of issues of security, war and peace, human rights and social justice, sustainable development and ecological balance in a world of violent conflict, the department has developed its concentration in Peace Education. Students are encouraged to follow a program that will prepare them to pursue the objectives of peace education in whatever area of education they choose to concentrate. In addition to the courses listed below, students can select relevant courses offered within other programs at Columbia University, Jewish Theological Seminary, and Union Theological Seminary. Students may also opt for a combined concentration in Peace Education and Conflict Resolution.

At least one course in Conflict Resolution is required of all students concentrating in peace education, ORLJ 5340. ORLJ 6040 is also strongly recommended.

Degree Requirements:

The programs are designed to provide students challenging course work related to international and transcultural dimensions of education. Requirements include work in four areas: a core curriculum, a concentration which is either an academic discipline or a professional field of education, 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 experience and the future career goals of the student may be taken

into account in the choice of appropriate course work.

Each student is expected to assume major responsibility for formulating, in cooperation with the program advisor, a plan of study that will best meet the general program requirements in a way most compatible with her/his own professional goals.

Master of Arts (32 points)

Core Courses: 6 points, including ITSF 4090 and ITSF 4091

- 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

- Concentration Courses:

 18 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: 18 points
- Electives: 15 points
- Ed.M degree candidates must complete a special integrative project designed to illuminate a major aspect of the program of study.

Doctor of Education (90 points)

(International Educational Development only)

Core Courses: 12 points

Courses in a field of professional education: 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

 Courses in an allied discipline: 30 points

 Transcultural/geographical area studies: 18 points

• Electives: 18 points

• All doctoral students must pass a certification examination and prepare and present a dissertation which addresses a theme, problem, or issue in the area of concentration within the framework of comparative and international educational development. Ph.D. students must also pass an oral certification exam.

For further program information contact the Programs in International Educational Development/Comparative and International Education, Teachers College, Columbia University, Box 55, New York, New York 10027 or call 212-678-3184.

Courses:

General

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 4090. Issues and institutions in international educational development (3)
Professors Tsang and Vavrus.
Required of all first-year students

in the program. This course explores current issues and debates regarding the nature of development and international education.

ITSF 4091. Comparative education (3)

Professors Bartlett and Steiner-Khamsi. Required of all first-year students in the program. Introduction to theories in comparative education, cross-national comparative analysis, educational indicator research, educational transfer and borrowing, and relation between culture and education.

ITSF 4092. Qualitative research and evaluation in international education (3)

Professor Steiner-Khamsi. Section 1 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 4094. Educational planning in international educational development (1–3)
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 to various approaches to planning and their attendant outcomes. Topics include:

- Professor Tsang, Topic 1: Educational Development and Policy in China
- Professor Martin, Topic 2: Human rights
- Professor Steiner-Khamsi, Topic 3: Civic literacy
- Professor Vavrus, Topic 6: Gender
- Faculty, Topic 7: Race and ethnicity

ITSF 4096. Strategic planning and organizational change in international and national educational settings (3)

Faculty. This course will focus on organizational and programmatic change and role of strategic planning in the change process. Students will apply a series of planning and implementation techniques such as "the future search planning conference," action/implementation planning, and basic tracking systems in analyzing existing, and developing new case studies.

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 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 5090. Education and Demographic Change

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 5580. Postcolonial studies of education (2–3)

Professor Steiner-Khamsi. Prerequisites: ITSF 4090 and ITSF 4091, completed or taken concurrently. 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 multinational and donor influences in education.

ITSF 5691-ITSF 5692. Colloquium on international education and the United Nations
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. Courses may be taken independently.

- ITSF 5691. Goals and content: Major world developments and their implications for education (3) Professor Steiner-Khamsi.
- ITSF 5692. Theory and teaching techniques: New trends in international education (3) Faculty.

ITSF 6590. Doctoral seminar in international and transcultural studies (1–3)

Faculty. Permission required. Presentation of research in progress and examination of professional roles.

Family and Community Education

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 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 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 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 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.

Finance and Planning

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 decision-making.

ITSF 4097. International 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 4155. Evaluating educational privatization and school choice (3)

Professor Levin. This course addresses the increasing emphasis on market-type choice systems including educational vouchers, for-profit educational firms, and charter schools. It places great emphasis on the theory of emerging empirical evidence underlying these developments in education.

- ORLD 4031. Financial administration of higher education institutions (Professor Baldwin)
- ORLA 4046. School finance: Policy and practice (Professor Richards)
- ORLA 5016. Law and educational institutions (Faculty)
- ORLA 5025. Ecology of educational management (Professor Richards)
- ORLD 4500. Special topics in higher and adult education: Financing of higher education (Professor Levin)

Language, Literacy, and Technology

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 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 foreign-language learners. Material fee: \$20.

ITSF 4019. Orality, literacy, and technology (2–3)

Faculty. An examination of literacy as a set of social practices, embodied both in the traditional practice of oral culture and in the rapidly emerging practices of technological culture. Materials fee: \$20.

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 4801. African-American language and communication (non-credit or 1)

Faculty. An exploration of the varieties of African American language use, with particular attention to the communicative functions they serve.

ITSF 4811-ITSF 4813. Computer based language teaching (noncredit or 1 each course)
Professor Kleifgen. Theoretical rationale. Examination of lesson design, organization and operation of language instructional courseware for first and second language learners. Assumes no computing experience. Courses meet on weekends.

- ITSF 4811. Computers, language and children
- ITSF 4812. Computers for high school and adult language learners
- ITSF 4813. Special topics in computers and language

MSTU 4049. Computers and writing (2–3)

Professor Kleifgen. An examination of the relationship between computers and the writing process. The course explores the effects of electronic text on traditional notions of text, literacy, and communication. Assumes no computing experience. Lab fee: \$25.

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 6020. Professional Communication (2-3)

Dr. Larsen. This course is designed to help students develop the professional knowledge and skills necessary for effective communication through such genres as conference presentations, contributions to journals, grant proposals, and evaluation reports.

ITSF 6032. Research issues in computers, language, and literacy (3)

Professor Kleifgen. Permission required. Research in the use of digital technology for language and literacy development. Techniques of computerized analysis. New research directions. Materials fee: \$20.

ITSF 6125. Research issues in communicative practices (3) Professor Kleifgen. Permission required. A critical review of selected research directions and paradigms for the analysis of spoken and written communication.

Peace Education

ITSF 4603. Human and social dimensions of peace (3)

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)

Explores issues of peace and violence from various perspectives, among them feminism and environment, emphasizing alternative security systems including human security. ITSF 4613. Fundamental concepts in peace education (3) "Fundamentals" 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 4800. International Institute on Peace Education (1)
This intensive summer program focuses on a specific peace education issue or theme. Presented over one or two weeks by an international staff with international participants, IIPE is offered jointly with cooperating universities in other countries and takes place annually on the campus of the cooperating university.

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 and mediation, Part I

Anthropology and Education

(Code: TFA) Program Coordinator: Professor Lambros Comitas

Applied Anthropology

(Code: TFO) Program Coordinator: Professor Lambros Comitas

Degrees Offered:

Anthropology and Education

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

Applied Anthropology

Doctor of Philosophy (Ph.D.)

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 priority 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.

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 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 cross-cultural and comparative perspective. Methodological emphasis is placed on intensive and systematic ethnography. The faculty has a distinguished record of publications and research projects, most of which has been conducted in the United States, Africa, the Caribbean, South America, and Europe.

Anthropology and Education

The program in Anthropology and Education offers a disciplinary approach 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 programs are conducted in collaboration with the Department of Anthropology at Columbia University, Columbia's 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, etc.).

In addition, our location in New York City allows students easy access to a myriad of prestigious academic and research institutions and provides a natural laboratory for student research on ethnicity, migration, and urban life. Through the Inter-University Doctoral Consortium, students may take courses to fulfill their Teachers College program requirements at the Graduate School and the University Center of the City University of New York, Fordham University, the New School for Social Research, and New York University.

Most of the programs' graduates find academic posts and administrative positions in colleges, universities, and professional schools. Others locate in federal and international agen-

cies, research institutes, private foundations, medical institutions, consulting firms, and social welfare and community service organizations in the United States and abroad.

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, research associates, and teachers in elementary and secondary schools 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's degree program is flexible, allowing students to address various professional concerns, satisfy diverse academic needs, and enhance professional skills. In the Ed.M. program, Teacher Certification may also be achieved in conjunction with other teacher education pro-

grams in the department and in the college.

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 outlined in the course requirements above. An overall Grade Average of B+ is expected. Students must also complete a

written examination on anthropology and education.

Dissertation Requirements After passing the certification examination, the candidate should begin writing a dissertation proposal. One or two years of anthropological field research is required for the collection of original field data based on the dissertation research proposal. After the proposal is approved by the Department, the candidate is required to register for continuous dissertation advisement until the dissertation has received final approval.

Doctor of Education

A minimum of 90 points of acceptable graduate credit is required for the Doctor of Education (Ed.D.), 45 of which 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.

The knowledge 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 inter-

national 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 or earned in courses 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 cer-

tification 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

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 (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 or earned 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 who 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 (15) 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 founda-

tional 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 4003. Culture and education (3)

Professor Varenne. An introduction to the major contributions of anthropology to the study of education with particular emphasis on America as culture in the United States and the world.

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. Four-point 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 sub-Saharan 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 course considers issues and problems of development in sub-Saharan Africa. It examines specific development projects from different theoretical and empirical perspectives.

Intermediate Courses

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: field-work, analysis, reporting (3) Professor Varenne. Permission required. ITSF5000 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 qualitative analysis (3)

Professor Harrington. Permission required. ITSF5000 or equivalent required. Issues of comparative and quantitative analysis of data generated by ethnographic/participant observation inquiries.

ITSF5003. Communication and culture (3)

Professor Varenne. Introduction to major theories of human communication and culture as they relate and build on each other.

ITSF 5010. Social organization and comparative institutions (3) Professor Bond. An introduction to selected theories of social organization and their application to the analysis of small-scale society as a background to the analysis of social and educational problems.

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. Crosscultural 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 the classroom (3)

Professor Varenne. Introduction to the ethnographic investigation of classrooms and to the educational policy issues it addresses.

ITSF 5017. Anthropology and the law (3)

Faculty. Analysis of various legal systems in state and stateless societies with case materials and other readings used to illuminate basic assumptions behind "legal" processes. In this context, what American lawyers mean when they say that their education and training enables them to "think like lawyers" is examined.

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 Professor Comitas. For anthropolo-

gists and non-anthropologists contemplating independent, qualitative research, 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 yearlong 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 MSTF 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, second-year doctoral students. Meets concurrently with MSTF 5610 during the spring semester.

Research Seminars

ITSF 6511. Seminar in psychological anthropology (3) Professor Harrington. Permission required. Prerequisite: ITSF 5013.

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: religion and politics in contemporary Africa (1–3)

Professor Bond. Permission required.

ITSF 6514. Topics in anthropology and education: cultural analysis (1–3)

Professor Varenne. Permission required.

ITSF 6515. Topics in anthropology and education: resilience in at-risk population (1–3)
Professor Harrington. Permission required.

ITSF 6516. Topics in anthropology and education: social structure (1–3)
Professor Comitas. Permission required.

ITSF 6911. Work group in psychological anthropology
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.

Bilingual/Bicultural Education

(Code: TLB)
Program Coordinator: Professor
Maria Torres-Guzman

Degree Offered: Master of Arts (M.A.)

Special Application Requirements/Information:

In addition to the Teachers College admissions application, applicants to the M.A. program in Bilingual/Bicultural Education or those applicants who wish to add a bilingual emphasis to a cooperating Teachers College program must submit:

- Program application (available from the Program office)
- Language proficiency examination*

 Interview (the Program office will contact you)

*Fluency in either Chinese, Haitian Creole, Korean, Russian, or Spanish is required for the Program in Bilingual/ Bicultural Education. Students who were educated at a college or university where the language of instruction is English must submit scores from a language proficiency exam. To schedule an examination, contact:

Foreign Language Proficiency Testing Service New York University School of Continuing and Professional Studies 48 Cooper Square, Room 107 New York, NY 10003-7154 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, e-mail: bilingual-bicultural@exchange.tc.columbia.edu.

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

Program Description:

Teachers and administrators in school systems across the country and around the world are facing the challenge of educating growing numbers of linguistically and culturally diverse student populations. In an effort to prepare these pupils for full participation in an increasingly literate, technological, and interdependent world community, many

schools are offering bilingual/bicultural instruction.

Teachers College has responded to the need for professionals prepared to provide services in bilingual/multicultural school settings by offering a program of studies designed to prepare graduates for teaching, administrative, and related roles in bilingual/bicultural instructional settings. The program is interdisciplinary in nature.

Degree Requirements:

Master of Arts

The M.A. student must complete a course of study in one of two routes: in-service or preservice. Pre-service students must meet a minimum of 40 points and in-service students a minimum of 33 points. The pre-service program is available to the Spanish language group only; the in-service program is available to all the language groups listed above.

The M.A. program meets all of the requirements for elementary and bilingual state certification. In addition to departmental requirements, M.A. degree candidates are required to complete an integrative project. Students should choose their program of study in consultation with an academic advisor.

Bilingual/Bicultural Education Emphasis

Students may, if approved, be admitted to a cooperating degree program with an emphasis in Bilingual/Bicultural Education. The substance and scope of courses within the emphasis (please see cooperating programs below) are contingent on the degree sought, on the major field the student has chosen, and on whether the student wishes to meet bilingual teacher certification requirements and, thus, is highly individualized.

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 description of the participating degree program to determine application deadlines.

Participating Degree Programs with an Emphasis in Bilingual Education:

- TABB 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.)
- TDAB Adult and Continuing Education (M.A., Ed.D.)
- TEBB Blind and Visual Impairment (M.A., Ed.D.)
- TEDB Deaf and Hard of Hearing (M.A., Ed.D.)
- TEGB Guidance and Habilitation (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.)
- TFIB Comparative 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 Education (M.A., Ed.M., Ed.D., Ed.DCT)
- TJEB Counseling Psychology (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.DCT)
- TLSB Teaching of Spanish (M.A., Ed.M., Ed.D., Ed.DCT)*
- TLXB TESOL-Japan
- TLZB Teaching of English to Speakers of Other Languages (M.A., Ed.M., Ed.D., Ed.DCT)
- 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.)

*Currently this program is not admitting students. Please contact the Office of Admissions at 212-678-3710 for updated information.

Courses:

ITSL 4020. Language and the bilingual special education child: the foundations (2–3) Faculty. This course examines theories and principles of practice from the fields of linguistics, bilingual education, and special education as they apply to bilingual special education. It introduces a cross-disciplinary approach to instructional planning for bilingual children with handicapping conditions.

ITSL 4021. Foundations of bilingual/bicultural education (3) Faculty. Historical review of bilingual educational practices in the United States. Analysis of linguistic, psychological, social, cultural, political, and judicial underpinnings of current practices in the field.

ITSL 4024. Linguistic foundations of bilingual/bicultural education (3)

Faculty. Introduction to the study of bilingualism. Application of sociolinguistic, psycholinguistic, and applied linguistic theory to the design and implementation of bilingual/bicultural educational models and materials. Students completing a concentration in bilingual education may take ITSL 4000 or ITSL 4001 in lieu of this course.

ITSL 4025. 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.

ITSL 4026. Social and cultural dimensions of bilingual education (3)

Faculty. Bilingual education in a cross-cultural perspective. A critical analysis of selected issues in bilingual education in the context of society and culture, drawing on sociological and anthropological concepts as they relate to in-school and out-of-school language learning. Special attention is directed to the role of bilingualism as a major resource in education for democratic pluralism and intercultural understanding.

ITSL 4027. Current topics in bilingualism and bilingual/bicultural education (1–3)
Professor Torres-Guzman. Studies of selected topics in bilingualism and bilingual/bicultural education, with special attention directed to current policy and research issues and to social and political developments in the United States.

ITSL 4028. Teaching reading in bilingual settings (3)

Faculty. Prerequisite: completion of at least one graduate or undergraduate introductory course in reading and TL4021. An overview of approaches to teaching reading in bilingual settings. Techniques for assessing pupil readiness for reading in the native or second language. Development of techniques for teaching reading in the native language. Criteria for introduction of reading in the second language and for selection of culturally appropriate materials. Techniques to manage dual language reading programs.

ITSL 4121-ITSL 4126. Bilingual/bicultural curriculum design: cognitive, linguistic, and cultural considerations (3 each course)

Faculty. Permission required. Prerequisites: (1) an introductory course in curriculum design and a course in foundations of bilingual/bicultural education; (2) complete proficiency in the English language and one additional language. A critical analysis of linguistic, cognitive, and cultural considerations in the design of bilingual/bicultural curriculum. Offered in six sections, contingent on projected enrollments for each language group.

- ITSL 4121. Multilingual (all language groups)
- ITSL 4122. Spanish
- ITSL 4123. Chinese
- ITSL 4124 Korean
- ITSL 4125. Russian
- ITSL 4126. Haitian-Creole

ITSL 4127-ITSL 4132. Bilingual/bicultural methods and materials: criteria for design and selection (3 each course)
Faculty. Permission required. Prerequisites: (1) ITSL 4121-ITSL 4126 and (2) proficiency in English and another language (Spanish, Chinese, Korean, Haitian Cre-

ole, Russian). Analysis, creation, and development of appropriate bilingual/bicultural instructional methods and materials for use in the language arts and content areas, with application to multimedia approaches; critique of current commercially prepared products; review and survey of approaches to development in the first/second language (Spanish, Russian, Chinese, Korean, Haitian Creole) and English; consideration and preparation of instructional alternatives to texts. Offered in six specific language groups.

- ITSL 4127. Multilingual (all language groups)
- ITSL 4128. Spanish
- ITSL 4129. Chinese
- ITSL 4130. Korean
- ITSL 4131. Russian
- ITSL 4132. Haitian Creole

ITSL 4133-ITSL 4137. Curriculum and methods for bilingual teachers (non-credit or 3)
Faculty. Permission required. Prerequisites: ITSL 4021 and ITSL 4121-ITSL 4126. Intensive review of curriculum and methods appropriate to the teaching of the subject areas in bilingual instructional settings. Offered as needed for those wishing N-9 bilingual teacher certification.

- ITSL 4133. Science
- ITSL 4134. Mathematics
- ITSL 4135. Language arts
- ITSL 4136. Foreign languages
- ITSL 4137. Social studies

ITSL 4323. Practicum in bilingual/bicultural education (3) Faculty. Permission required. Practicum for experienced teachers in bilingual settings.

ITSL 4720. Student teaching in bilingual/bicultural education (3–4)

Faculty. Permission required. Student teaching in a bilingual educational setting on an elementary or secondary level. Experiences include first language, TESOL, content area observation, and supervised practice.

ITSL 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 the limited English proficiency (LEP) child.

ITSL 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. Guidance and 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.

ITSL 5024. Bilingual/Multilingual education: international perspectives (3)

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.

ITSL 5511. Bilingual/multicultural educational leadership (1–3)

Faculty. Permission required. This seminar will focus on a) integrating the knowledge of educational administration within the context of bilingual/bicultural environments, b) integrating theory and practice, c) defining leadership needs for bilingual/bicultural set-

tings and d) reflecting on the practice of educational administration.

ITSL 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.

ITSL 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.

ITSL 6521. Seminar in bilingualism and bilingual education (3) Faculty. A review of research in bilingual/bicultural education from an interdisciplinary perspective. The focus is on the analysis of research, evaluation methodologies and findings, and their potential application to current theory and practice.

ITSL 5202. Fieldwork (1–6 each course)

Permission 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.

ITSL 6202. Advanced fieldwork (1–6 each course)
Permission required.

ITSL 5201-ITSL 5207. Fieldwork (1–6 each course)

Permission 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. The titles of ITSL 5201-ITSL 5207 parallel those of ITSL 4901-ITSL 4907.

ITSL 6201-ITSL 6207. Advanced fieldwork (1–6 each course) Permission required. See description for ITSL 5201-ITSL 5207. ITSL 6401-ITSL 6407. Internship in college teaching (1–6 each course)

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. Course titles parallel those of ITSL 4901-ITSL 4907.

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

- ITSL 4021. Foundations of bilingual/bicultural education (3)
- ITSL 4025. Cross-cultural communication and classroom ecology (3)
- ITSL 4027. Current topics in bilingualism and bilingual/ bicultural education (1–3)
- ITSL 5023. Guidance techniques for the bilingual/bicultural child and family (3)

Economics and Education

(Code: TFE) Program Coordinator: Professors Thomas Bailey

Degrees Offered:
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Philosophy (Ph.D.)
(Ed. Policy option available)

Special Application Requirements/Information: The GRE General Test is required for the Ph.D. Program. Some background in economics is preferred.

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 priority deadline.

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 with a concentration in Educational Policy, 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 policy-makers. 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 policymaking.

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
- 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 two-semester session in which students are taught skills that are an essential building block for their career development. Students will take courses in economic and policy analysis in

education, applied statistics, management tools in education, development issues and educational policy, and in related fields as electives. In the summer session, students will apply the knowledge acquired during the academic year in a master's project.

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, educational finance, economic evaluation and cost analysis in edu-

cation, economics of urban and minority education, economics of educational technology, teachers markets, and others.

Courses:

ITSF 4050. Economics of education (3)

Professors Bailey, Levin and Tsang. Teaches the basic economic concepts and methods to be used for further study and analysis of educational finance, education and inequality, education and economic growth, the impact of educational policies on educational outcomes, school reform, and school choice.

ITSF 4051. Education and economic development (3)
Professors Rivera-Batiz and Tsang. 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 4052. Education and economic growth (2–3)

Faculty. Relation of education to economic growth in the context of less developed countries, the social returns to education, migration and "brain drain," and manpower planning.

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. 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 decision-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 4059. Education, economic growth, and competitiveness (3) Professor Bailey. The relation between education and economic growth, productivity, and competitiveness of the firm and the macroeconomy. Focuses on the educational implications of the changing nature of work, greater international competition, and the varying rates of productivity growth.

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 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, for-profit educational firms, and charter schools. It places great

emphasis on the theory of emerging empirical evidence underlying these developments in education.

ITSF 4550. Workshop in economics and education () Professor 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.

See also:

- ORLJ 4025. School business administration (3)
- ORLJ 5020. Information systems for decision-making in learning organizations (3)
- ORLJ 5021. Management science (3)
- ORLJ 5025. Strategic management in education I: fiscal systems (3)
- ORLJ 5026. Strategic management in education II: micro computer (3)
- ORLJ 5046. School finance: resource allocation (3)
- ORLD 4030. The economics of post-secondary education (3)
- ORLD 4031. Financial administration of higher education institutions (3)
- HUDM 4126. Applied regression analysis (3)

See also in the Columbia University Bulletin: Econ G4213, 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 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 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.

ITSF 4900. Studies in international and transcultural studies (1–15)
ITSF 6900. Studies in international and transcultural studies (1–15)
ITSF 6950. Studies in economics and education (1–15)
ITSF 6990. Studies in international educational development (1–15)
ITSF 6991. Studies in compara-

tive education (1-15)

Chair: Professor O. Roger

Anderson

Room 321 Thompson Hall,

Box 19

Telephone: (212) 678-3405 Fax: (212) 678-8129

WEB Address:

http://www.tc.columbia.edu/ac

ademic/mst

Please direct general admissions questions to the Office of Admissions, (212) 678-3710, tcinfo@www.tc.columbia.edu. International applicants: Please direct inquiries about visas, employment, financial aid, and cultural adjustment to tcintl@columbia.edu. Preservice Science Education M.A. applicants may refer admissions questions to Professor Keith Sheppard (212) 678-

sheppard@exchange.tc.colum-bia.edu.

Programs:

Communication and Education Computing and Education Instructional Technology and Media Mathematics Education Science Education

Faculty:

Professors:

O. Roger Anderson John Black Herbert Ginsburg Robert McClintock Herve Varenne Bruce R. Vogeli

Professor of Practice:

Irving Hamer, Jr.

Visiting Professors:

Henry O. Pollak J. Philip Smith

Adjunct Professors:

Michael J. Passow Joel E. Schneider

Associate Professors:

Angela Calabrese Barton Jo Anne Kleifgen Xiaodong Lin Robert P. Taylor

Research Associate Professor:

Frank Moretti

Adjunct Associate Professors:

Jamsheed Akrami Thane B. Terrill

Assistant Professors:

Elaine Howes Danielle Kaplan Alexander Karp Keith Sheppard Erica Walker

Adjunct Assistant Professors:

Howard Budin Robin S. Kalder Susan Lowes Patrizia Magni Ross H. Nehm Kathy Powell Laurie Seminara Robin Stern Robert Steiner

Instructors:

Paul Acquaro Brian Baldwin Craig Bolotin Shawna Bú Shell Eric Cohen Thomas A. Covotsos Andrea Gav Julia Hutchison Verneda E. Johnson Ryan Kelsey Sheila Kieran-Greenbush Jerry Lege Maria Rivera Maulucci Ellen Meier Chrystalla Mouza James Perkins Laura Pesutti Mario Riccobon Dennis M. Robbins Francine Smith Kathleen St. Louis Florence Sullivan

For information about faculty and their scholarly and research interests, please refer to the "Faculty" section of the Catalog.

Departmental mission:

The programs of study in our department focus on issues of educational practice and related professions in science, technology, mathematics, 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 broad-based public understanding of these three fields of human endeavor and they are often closely linked in the curricula of educating institutions. The study of communication and technology in education is broadly based in these three disciplines and also is enriched by cultural and historical wisdom that provides a scholarly perspective on the role of media in society and particularly in education. Within this unifying view, the Department of Mathematics, Science and Technology includes specialized programs to address the needs of professional practitioners in each of the three areas.

The Department houses the College's Programs in Mathematics and Science Education. These programs include scholars who address the preparation of mathematics and science teachers and teacher educators, and more particularly focus 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 linkages between science and society; the use of computers, computer modeling and instrumentation in mathematics and science instruction. These scholars, many of whom have extensive international experience in their subjectmatter disciplines and in educational theory and practice, therefore comprise one of the sections of the department.

The Program in Communication, Computing, and Technology (CCTE) in Education provides a cluster of degree programs for students who seek to develop leadership capacities in the uses of information and communication technologies in education. The programs prepare candidates both 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.

Each of the programs has a unique focus or perspective, but the faculty also share some 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.

Communication, Computing, and Technology in Education

Program Coordinator: Professor John Black 322 Thompson Hall, Box 8 Telephone: 212-678-3344 Fax: 212-678-8227 WEB Address: http://www.tc.columbia.edu/ac ademic/mst/ccte/

Please direct general admissions questions to the Office of Admissions, (212) 678-3710, tcinfo@www.tc.columbia.edu. International applicants: Please direct inquiries about visas, employment, financial aid, and cultural adjustment to tcintl@columbia.edu.

Communication and Education

(Code: TUC)

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

Computing and Education

(Code: TUD)

Degree Offered: Master of Arts (M.A.)

Instructional Technology and Media

(Code: TUT)

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

Special Application Requirements/Information: M.A. and Ed.M. applicants are reviewed on an ongoing basis. For scholarship awards, applicants who meet the priority 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 January 2nd deadline.

Doctoral applicants are required to submit a writing sample and results from the GRE General Test. They are also strongly encouraged to arrange for an interview. 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 should meet the Januarya 2nd priority deadline for applications.

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 in making admission decisions.

Program Descriptions:

Communication, Computing, and Technology in Education provides a cluster of degree programs for students who seek to develop leadership capacities in the uses of information and communication technologies in education. It 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 towards two poles of understanding and practicetowards a comprehensive understanding of the cultural and historical implications of new technologies for education and life and towards purposefully selecting and shaping the uses of new media in educational practice at all levels.

CCTE's programs deal with the many ways in which material culture changes and shapes educational practice at all its levels. Here are some assumptions about the long-run effects that innovations in information

and communications 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 communications 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.
- As digital information and communications technologies, 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 and communications 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 the present and future implications of new media, and to play a constructive role in shaping the educational response to innovations in information and communications technologies. Although these concerns are common to all three programs, each has distinctive nuances with respect to methods and purpose:

- Communication and Education relies primarily on social science inquiry to understand, interpret, and shape how information and communications technologies influence culture and education.
- Computing and Education works with computer information systems to facilitate the effective extension of digital technologies into educational practice.
- 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, develop-

ment, 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 (http://www.ilt.columbia.edu), the Center for Technology and School Change (http://www.tc.columbia. edu/~academic/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.

Communication and Education

Through the program in Communication and Education, students prepare for a variety of roles:

- Teaching and research positions in higher education; for work in schools using information and communications technologies as means for improving educational practice
- Conducting formative and evaluative research in the areas of educational media and information technologies
- Careers as innovators in the design and use of new media for educational purposes
- Work in business and government designing and implementing corporate communication programs.

The program uses the methods of the social sciences, encompassing both qualitative and quantitative approaches to the study of communication and education. They ask, in particular, how education and other social systems change under the impact of new media. Fac-

ulty 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, information processing, and cognition condition educational practice
- Explore positive and negative effects of media 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 to human activity; that is, both to material systems of communication in which technologies are the matter of primary interest and to interpersonal, direct communication dynamics in which unmediated exchanges, face-toface, 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 or through a global broadcast using satellite transmission.

Computing and Education

Students who complete the master's program in Computing and 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 and training

 academic computer centers and corporate information services, and in education departments at the federal, state, and local levels, managing the integration of information and communications 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.

In recent years, students in the program have made three questions paramount:

- Which emerging technologies hold greatest promise for enriching the learning experience throughout the educational enterprise?
- What pedagogical strategies should designers embody in instructional materials, including those based on multimedia?
- 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?

The World Wide Web and related technologies have low-

ered 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.

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 students that the design will serve. The ability to understand the student, through empirical research and empathic engagement will make the design of instructional technology be more than just technically proficient, but educationally valuable as well. In all, this attention to the student 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.

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 our 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 about these opportunities, students should consult individual faculty.

Degree Requirements:

Formal recommendations should not determine the course of study a student will take; they should help structure the type and character of student choices. The collegewide degree requirements are stated in the "Degree Requirements" section of this bulletin. The following description of steps through programs specific to Communication, Computing, and Technology in Education amplifies 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 specifics about requirements and the academic calendar from the program office, Box 8, (212) 678-3344. Choosing a program of study is a necessary, but not sufficient, way to a degree. 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

To earn the Master of Arts (M.A.) degree, students must satisfactorily complete of 32 points of course work and an integrative project which combined consist of roughly the equivalent of one calendar year of full-time academic work. In CCTE programs, the M.A. degree serves two main functions: in part as a mark of entry-level professional qualifications in the fields we cover, and in part as a grounding for further, more advanced specialization in the field. Students should consult with a faculty advisor and choose their courses with care in light of these functions. Teachers College has a breadth requirement, which students fill by taking three courses, each for at least 2 points, outside the area of Communication, Computing and

Technology (i.e., courses with a prefix other than MSTU).

Typically, students in each program area confer with an advisor and select courses within the following guidelines: They should take MSTU 4000, Core Seminar in Communication, Computing, and Technology, for 1 point as early in their program as possible. They should take four courses from the core in their area, listed here, and at least one course from the core in each of the other areas.

Where appropriate to special circumstances arising from a student's interests or from scheduling constraints, a student may substitute other courses from CCTE offerings in consultation with his or her advisor for the core courses listed here.

Core Program Courses

Communication and Education

- MSTU 4000, Core seminar in communication, computing, and technology in education
- MSTU 4010, Theories of communication
- MSTU 4016, History of communication
- MSTU 4018, Design & communication in modern culture
- MSTU 4049, Technologies and literacies
- MSTU 5003, Communication and culture
- MSTU 5020, Computermediated communication

Computing and Education

- MSTU 4000, Core seminar in communication, computing, and technology in education
- MSTU 4022, Telecommunications, distance learning, and collaborative interchange
- MSTU 4031, Programming I (required of those who are not proficient programmers)
- MSTU 4052, Computers, problem solving, and cooperative learning

- MSTU 4085, New technologies for learning
- MSTU 4133, Cognition and computers
- MSTU 5555, Technology and the emergence of a global curriculum

Instructional Technology & Media

- MSTU 4000, Core seminar in communication, computing, and cechnology in education
- MSTU 4008, Information technology and education
- MSTU 4083, Instructional design of educational technology (I and II)
- MSTU 4133, Cognition and computers
- MSTU 5020, Computermediated communication
- MSTU 5030, Intelligent computer-assisted instruction
- MSTU 5510.01, Topical seminar—Design of distributed instruction

Candidates for the M.A. degree will be 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, we recommend strongly that students take some Fieldwork or Internships as an integral part of their master's program, for experientially grounded learning is an invaluable preparation for professional practice. We include further information on Fieldwork and Internships below.

Master of Education

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 qualifica-

tions for students who have previously completed a master's degree at Teachers College or other institutions. 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 towards 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 for a 3-point course. This project should represent the student's interests well, one that allows him or her to display the specialized skills developed in study 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 has great flexibility and students can use it to lay a strong foundation for significant positions of leadership that demand high levels of skill but do not require doctoral-level academic certification. For instance, students can put together a very effective 60-point program dealing with "school media for curriculum innovation." In a similar way, one can develop a very strong grounding in educational software development through the Ed.M. degree. It can serve many purposes: one needs to think through one's aspirations and use the scope of the Ed.M.

program to build academic and experiential foundations for their achievement.

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 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 ability in one or more modes of inquiry, contribute professionally to a field through conferences, presentations, or publications, and participate actively in CCTE functions outside class work.

Programs are planned individually in consultation with a faculty advisor, starting with the admission interview and initial writing assignments. Doctoral candidates should develop a systematic plan for study early in their program, encouraging sustained consideration of a dissertation area and tailoring course selection to support dissertation work. The doctorate represents the highest level of educational preparation achievable in the field. To complete it well, students should meet all requirements with a fullness and in an intellectual spirit consonant with this status.

Special Degree Cohorts:

The Internship-Based Cohort Option:

This track is for students who will work full-time for a master's degree in one of the programs in Communication, Computing, and Technology in Education at Teachers College. The Cohort option is for students particularly interested in integrating advanced technologies into the school curriculum, K–12.

Each September, CCTE will admit up to 20 masters candidates who will study full-time as a cohort, completing their degree in one year. Through courses, fieldwork, and internships, participants will study leading efforts to develop the school curriculum through technological innovation. Participants will take a prescribed set of courses and engage in practical design and implementation work to fulfill current master's degree requirements. They will acquire a theoretical basis for creative work with technology in education through selected courses. They will gain practical experience in the classroom uses of information technology via studio design work and internships at schools in New York City with technology projects developed by the Institute for Learning Technologies and other research and development efforts at Teachers College.

Upon completion, participants in the Internship Cohort should be ready for leadership roles on school faculties in using advanced information technology to transform the teaching and study of core curriculum areas. For information, write Robert McClintock, Box 136, Teachers College, call (212) 678-3344 or 678-3115, or visit www.ilt.columbia.edu/interns/.

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 up to 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 Howard Budin, Box 8, Teachers College, call (212) 678-3773, or visit www.tc.columbia.edu/~ academic/ctsc/imp.htm.

Courses:

Most courses are offered once a year; a few are offered each term and some once every two years. Current scheduling information may be obtained from the program office.

MSTU 4000. Core seminar in communication, computing and technology (1–2) Professor McClintock and Faculty. Required for incoming students. Meets with MSTU 6600. Discussion of critical issues, reading of key works, development of project Communication, Computing, and Technology in Education, presentation of work in progress, conversations with leaders in the field. Special fee: \$25.

MSTU 4008. Information technology and education (3) Professor Rothkopf. 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 feature-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

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 4022. Telecommunications, distance learning, and collaborative interchange (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 crosscultural communication (3) Professor Akrami. Analyzes how films explore culture. Discussion of the film as well as on the cultural messages portrayed. Special fee: \$50.

MSTU4024. Television and the development of youth (3) Ms. Kaplan. 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 4030. Computer applications in education (3) Mr. Schultheiss & 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. Schultheiss. Communicating with computers and humans through programs. Uses a graphic language to formalize the concepts behind software structure, and a current, widely-used implementation language such as Java to construct representative applications. Special fee: \$50.

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. Bu Shell, Ms. Mouza, Ms. Kung, Mr. Bolotin, and Dr. Magni. Introduction to hypermedia products and programming and their

role in education. Four-point 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. 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 4078. Technology and education in Western history (3) Ms. Hogan. An historical inquiry into the educational implications of technological change, particularly as it has affected cultural values and the capacities to organize action and to communicate ideas. Special fee: \$30.

MSTU 4080. Television and video applications in education (3) Professor Gifford. 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 (I and II) (3)

Professor Gifford. 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 computers

Professor Black. 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:
- 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. The participating student will propose a program of independent research or project development to a faculty member. Students in their first term of study are generally not accepted. Conference hours are arranged.

MSTU 5003. Communication and culture (3)

Professor Varenne. Introduction to major theories of human communication and culture as they relate and build on each other.

MSTU 5020. Computer mediated communication (3) Professor McClintock. Analyzes characteristics of such computermediated 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 on-line communication systems. Special fee: \$50.

MSTU 5030. Intelligent computer-assisted instruction (3) Mr. Cohen. 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, and they develop and test intelligent computer-assisted instruction materials for topics of interest to them. Special fee: \$25.

MSTU 5031. Programming II (3-4)

Faculty. Prerequisite: MSTU 4031 or a solid basic knowledge of programming. Applies programming to significant problems through team projects using Java or C++ to construct salient applications. Special fee: \$50.

MSTU 5191-MSTU 5192. Educational video production I and II

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 interactive learning (3–4)

Faculty. This course explores the psychological and educational literature on interactivity and learning. What is the role of interactivity in learning and teaching with new educational technologies? What are the key formats and attributes of interactivity 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-MSTU 5204. 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 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. Topical seminars include the following:

• Topical Seminar: Toward a theory of distributed instruction (3)

Professor Gifford. Can the same theories of instruction that inform the organization and conduct of the teaching and learning enterprise within conventional classroom settings also be utilized to guide the design, development and continuous improvement of location-independent computermediated instructional settings? We think not. If this is the case, then what new varieties of teaching methods and learning activities must these new theories of distributed instruction accommodate? Moreover, how important is computer-mediated collaborative learning and teaching in these new theories? The purpose of this yearlong seminar is to provide graduate students with a serious interest in learning, teaching and technology a forum for examining

these similar questions. Special fee: \$25.

• Topical Seminar: Databasedriven web site development

Mr. Matsuoka. A laboratory course in developing educationally oriented database driven web sites. HTML forms, ColdFusion, SQL programming and building databases/data modeling. Course readings and discussions on internet related issues: interface and application design and development. Special fee: \$50.

- Topical seminar: Research methodologies for technology in teaching and learning (1) Professor Lowes. Designed for M.A. or Doctoral students in the CCTE department who are developing research proposals that focus on teaching and learning, this one-credit seminar will look at the theoretical bases for different quantitative and qualitative research methodologies (questionnaires and surveys, interviews, ethnographies and case studies, action research), as well as the advantages and disadvantages of each. We will also discuss how to define research problems and develop researchable hypotheses from the existing literature. Each student should come with a research project in mind.
- Topical Seminar: Technology, education, and public policy (3)

Professor McClintock. A survey of public policy issues influencing the educational uses of information and communications technologies. Issues will include federal policies to link classrooms to the information infrastructure such as the e-rate, the ways research funding affects the educational uses of digital technology, and intellectual property issues with respect to new media in education. Special fee: \$25.

• Topical seminar: Media and education (3)

Professor Budin. This seminar explores a variety of media and their effect on our thinking, our culture and education. If it is true, as Marshall McLuhan and

others have described, that the printing press defined the crucial aspects of the modern world, are we now moving away from the linear, standardized, "factory" culture and education into a new paradigm defined by new media? This seminar will address a number of key questions involved in this shift. It will examine ways in which media differ from each other, society's expectations for new media, and how education has used media or should be using them. Special fee: \$25.

• Topical seminar: Writing technology (3)

Professor Taylor. Participants in the course will examine some seminal works about writing, will study some exemplary traditional texts and some hypertexts, and will engage in extensive writing experience for both media. The experience should benefit both those preparing for work in the new media and those who simply need sharper expressive writing skills. Writing in the context of email will also be examined. Special fee: \$25.

• Topical Seminar: Technology and school change (3)

* Dr. Budin. This seminar will examine the history of educational expectations for technology and technology's record in changing schools, in the context of theories of institutional change and efforts through the modern school restructuring movement to include technology. The seminar will examine recent documents and reports on using technology to effect change. Part of the seminar's work will involve planning for effective change via new technologies. Special fee: \$25.

• Topical seminar: Social and emotional learning and digital technology (3)

Dr. Stern. This course will explore how to experience and enhance social and emotional learning. Students will create projects that will focus on the approaches of digital technology to the teaching and learning of one or more components of social and emotional intelligence. Special fee: \$25.

• Topical seminar: Art, music, and technology: Their symbiotic interplay (3)
Professor Taylor. Students will visit art exhibits, attend live musical performances, and examine selected video and computer artifacts, including web sites, to explore alternately the use of technology by the fine arts and the use of these arts by technology, particularly with respect to the world wide implications of this symbiosis for education. Special fee: \$25.

• Topical seminar: Gender, communication, and digital technology (3)

Dr. Stern. The focus of this course is to look at the differential impact of digital technology, an ever increasing part of socialization, on gender. Participants will review and examine commonly known linguistic and communication differences and analyze how and if they have been altered through the medium of digital technology. Special fee: \$25.

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 website, www.tc.columbia.edu/~global. Special fee: \$25.

MSTU 5814. Work conference (0–2)

Faculty. Permission required. Occasional brief conferences convened by Communication, Computing, and Technology on subjects of special interest.

MSTU 6030. Evaluating technology in education (3)

Faculty. Limited enrollment. Introduces a range of evaluative instruments and techniques and applies them, through student teams, to a representative instructional software and to technology-based educational innovations. Special fee: \$25.

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. Prereq

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, communication facilities. Students in their first term of study are generally not accepted.

MSTU 6532. Seminar in cognitive science (1–3)
Professor Black. 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 McClintock and Faculty. Continuous participation required of certified doctoral students. Meets with MSTU 4000. 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 development to a faculty member. Students in their first term of study are generally not accepted.

MSTU 7501-MSTU 7504. 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 catalog on Continuous Registration for Ed.D. degree.

Mathematics Education

Program Coordinator: Professor Bruce R. Vogeli (Code: TCA) 323 Thompson Hall, Box 210 Telephone: 212-678-3381 Fax: 212-678-8129 WEB Address: http://www.tc.columbia.edu/ac ademic/mst/mathematics/ Please direct general admissions questions to the Office of Admissions, (212) 678-3710, tcinfo@www.tc.columbia.edu. International applicants: Please direct inquiries about visas, employment, financial aid, and cultural adjustment to tcintl@columbia.edu.

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 Certificate
in the College Teaching of an
Academic Subject
(Ed.D.C.T.A.S.)
Doctor of Philosophy (Ph.D.)

Special Application
Requirements/Information:
Applications are reviewed on an ongoing basis. Preference in scholarship awards will be given to applicants who meet the priority deadline.

Mathematics education students seeking Master of Arts, Master of Science and Master of Education degrees are expected to have completed at least 30 credits of undergraduate mathematics.

Applicants who wish to receive New York State teaching certification should apply to the Master of Arts degree program. A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

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.

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 theoretically and practically based educators. 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 in the tristate metropolitan region.

Through funded projects, dissertation research, training and service to national teacher 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 Mathematics Program emphasizes strong content preparation in a variety of areas of pure and applied mathematics relevant to education.

Master's level offerings in mathematics 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 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 pre-service 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. Courses taken through these programs and elsewhere at Teachers College in mathematics, and mathematics education, and professional educa-

tion to meet individual needs may be supplemented by courses taken in other Faculties of Columbia University.

Master of Education and Master of Science

Both programs require 60 points (including up to 30 points of transfer credit for the Ed.M. and the M.S.) and involve extensive preparation in mathematics education. 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 Department and College requirements.

Applicants for the Ed.M. and M.S. degrees also must 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, 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 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.

In planning a program of study, it should be noted that doctoral students are required to complete a minimum of twenty 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 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 pre-service education for students entering the profession. In-service programs are designed individually in consultation with a faculty advisor to reflect each teacher's background and goals. The pre-service 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. Students who require additional mathematics content in preparation for student teaching are advised to enroll in content courses in the summer preceding the academic year during which they enroll in student teaching.

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, pre-service 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 coupled with 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.

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 42 point mathematics/ mathematics education requirement or can be taken as electives. In order to insure that prospective college teachers 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 offered by other departments.

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 three points in at least two semesters. (Please see course lists below for descriptions.)

Master of Arts

Normally students complete 24 credits in courses in mathematics and mathematics education including MSTM4019 (see course list below for descriptions) and selected courses in related disciplines such as statistics and computing. The remaining 8 credits (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 Colloquia in Mathematics Education for one to three 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 below for descriptions.)

Prospective community college teachers should select courses in at least three mathematical areas such as analysis, algebra, computing, etc. in preparation for study beyond the master's level. Preparation in computing is recommended for all specializations. Teachers desiring a specialization in computing should enroll in MSTM 4036, MSTM 5028 and MSTM 5029. MSTM 4820 and MSTM 4827 are also recommended. (See course list below for descriptions.) 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 faculty 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 Faculty 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.A.S., 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 Autumn, 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: MSTM 5031, MSTM 5032, MSTM 4036, MSTM 6030, MSTM 6033, MSTM 6034, or MSTM 6126 and, with permission of the Department, sit for the content area certification examination upon completion of the course.

Doctoral students whose theses require statistical analysis should include appropriate sta-

tistics 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 and 20 points in related disciplines.

Ordinarily, points in mathematics and mathematics education should include at least 45 points in mathematics content courses, 12 points in mathematics education courses, and 12 points of research preparation including MSTM 6500 and MSTM 7500. (See course listing below 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. Prospective mathematics supervisors should select courses relevant to curriculum design, supervision, evaluation, and educational administration.

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 scholarly project 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 project. 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.A.S.) 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 Mathematics", available in the Office of Doctoral Studies.

A program of study for the Ed.D.C.T.A.S. 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 24 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 below 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 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 below 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.A.S. 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.A.S. degree requirements include a scholarly project 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 project. Dissertations in the college teaching of mathematics can be (1) experimental studies in adult learning, (2) design and formative evaluation of college mathematics curricula, or (3) analytical studies in policy theory in mathematics post secondary education.

Doctor of Philosophy

The Doctor of Philosophy (Ph.D.) degree emphasizes research competencies. The degree requires a scholarly dissertation of intellectual merit and sound research methodology. Thesis research may include analytical studies of the process of teaching or of the construction and evaluation of curriculum material, experimental studies of the teachinglearning 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 Departmental brochure on doctoral programs 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 30 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 Department to request substitution. Students in mathematics may not use computer languages or statistics to satisfy the language requirement.

The Ph.D. dissertation is a scholarly study contributing new knowledge to the field and should be planned early in the program when sufficient advanced courses have been completed to permit the candidate to enroll in relevant research courses. Ph.D. dissertations in mathematics education should be (1) experimental studies in learning, (2) analytical studies in policy, theory in mathematics education, or (3) other scholarly investigations of problems and issues of broad significance in the field.

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

Mathematics Education

For certain courses in the program in Mathematics Education, special fees, including laboratory fees, may be assessed.

Theory and Methods

*MSTM 4019. Mathematics teaching and learning I (3)
Professor Vogeli. Cognitive development and learning strategies for teaching and the use of instructional materials. Current research in mathematics education.
Required for pre-service students.

MSTM 4020. Mathematics teaching and learning II (3) Faculty. Historical/comparative study of mathematical education programs in the United States and abroad. Mathematics education with special student populations. Curriculum development techniques.

*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 the social sciences.

MSTM 5803. TV: Medium for mathematics education (3) Faculty. Examination of television and web-portrayals of mathematics for elementary, secondary, and college students and their teachers. Contributions by media experts from the Children's Television Workshop, the Smithsonian Institute, and other prominent institutions.

*MSTM 5010. Mathematics in the elementary school (3) Professor Vogeli. 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 pre-service students.

MSTM 5012. Mathematics in two- and four-year colleges (3) Faculty. Problems, issues, and methods in the college teaching of mathematics.

*MSTM 5020. Mathematics and multicultural education (1–3) Professor Vogeli. Survey of mathematical topics and methods appropriate for multicultural and bilingual programs.

MSTM 5022. Mathematics curriculum development (2–3) Professor Vogeli. Principles, strategies, and techniques for curriculum development and textbook preparation in mathematics.

MSTM 5023. Problem solving (3) Faculty. Theories and methods of mathematical problem solving with applications to classroom instruction.

MSTM 5520. Seminar in the college teaching of mathematics (3) Faculty. Current issues in undergraduate mathematics. Examination of relations between elementary and advanced mathematics. See also: listings under Program for Pre-service Mathematics

Teacher Education.

MSTM 5061. Evaluation in mathematics education (3) Professor Karp. Theories and methods of evaluating pupils and programs in the cognitive and effective domains.

Content Courses

Courses in mathematics review and extended competencies that support graduate study and research in mathematics education, statistics, computing, and in other fields such as science education, measurement and evaluation.

MSTM 4031. Number theory (3) Professor Karp. 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 4036. Discrete mathematics (3)

Dr. Pollak. Discrete mathematics, combinatorics, graph theory.

MSTM 4037. Computer graphics (3)

Professor Vogeli. Transformations, scaling, clipping, windowing, and hidden line algorithm steganography. Software development for applications to mathematics and science education.

MSTM 4038. Finite mathematics (3)

Faculty. Statements, propositions, and sets. Vectors and matrices. Probability. Applications: finite Markov chains, game theory.

*MSTM 4039. Mathematical foundations of programming (3) Faculty. Logic, Boolean algebra, switching circuits, Turing machines and computability.

*MSTM 4820. Basic Java programming I (3)
Faculty. An intensive course in Java Programming including classroom applications.

*MSTM 4821. Basic Java programming II (3)
Faculty. An intensive course in Java Programming including

classroom applications.

MSTM 4827. C++ programming workshop (3)

Faculty. Types, operators, and expressions in C++. Functions, program structure. Pointers, arrays, classes and objects.

*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 5028. Data structures and algorithms (3)

Professor Vogeli. Data types and structures, stacks, queues, linked lists, trees, graphs, hashing; fundamental search/sort algorithms.

MSTM 5030. Topics in probability theory (3)

Faculty. Simple, compound, and conditional probabilities and applications. Doctoral students should register for MSTM 6030.

MSTM 5031. Topics in the foundations of mathematics (3) Faculty. Propositional and predicate calculi, set theory, axiomatics, order types, and the linear continuum.

MSTM 5032. Topics in geometry/ topology (3)

Dr. Smith. Foundation of geometry/topology. Emphasis upon the relationship between topology and geometry and other mathematical areas.

MSTM 5033. Topics in algebra

Faculty. Groups, rings, fields. Doctoral students should register for MSTM 6033.

MSTM 5034. Topics in analysis (3)

Faculty. 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)

Faculty. 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 normal distribution and its applications. Analysis of variance and regression. Doctoral students should register for MSTM 6126.

MSTM 6030. Advanced topics in probability theory (3) Faculty. Open only to doctoral students. Emphasis on proof and advanced applications.

MSTM 6033. Advanced topics in algebra (3)

Faculty. Open only to doctoral students. Advanced study of groups, rings, and fields.

MSTM 6034. Advanced topics in analysis (3)

Faculty. 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.

Pre-service 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.

MSTM 4760. Student teaching in mathematics (4)
Professor Karp. Permission required. Prerequisite: MSTM 5011. Open only to students enrolled in the pre-service program. Students do supervised teaching in metropolitan area schools.

MSTM 5010. Mathematics in the elementary school (3)
Professor Vogeli. 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 pre-service

students.

MSTM 5061. Evaluation in mathematics education (3) Professor Karp. Theory and methods of evaluating pupils and programs in the cognitive and affective domains.

MSTM 5264. Guided supervision of student teaching in mathematics (2)
Faculty. Permission required.
Open only to doctoral students.
Guided field experience in supervising student teachers.

Independent, Advanced and Dissertation Study

MSTM 4901. Guided study in mathematics education (1 or more)

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)

Professor Vogeli and Professor

Karp. 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 or more)
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 (0–3)

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 or more)
Permission required. Open to postdoctoral students accepted for study at Teachers College.

Science Education

Program Coordinator: Professor Angela Calabrese Barton 412A Main Hall, Box 210 Telephone: 212-678-8224 Fax: 212-678-8129 WEB Address: http://www.tc.columbia.edu/academic/mst/science

Please direct general admissions questions to the Office of Admissions, (212) 678-3710, tcinfo@www.tc.columbia.edu.

International applicants: Please direct inquiries about visas, employment, financial aid, and cultural adjustment to tcintl@columbia.edu.

(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.

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.)

Special Application
Requirements/Information:
Preference in scholarship
awards will be for those applicants who meet the priority
deadline. Preservice Science
Education M.A. applicants may
refer admissions questions to
Professor Keith Sheppard (212)
678-3425,
sheppard@exchange.tc.columbia.edu.

Applicants who wish to receive New York State teaching certification should apply to the M.A. degree program.

A student in this program who wants to qualify for New York State teaching certification must complete the program and file for certification prior to February 1, 2004. Teachers College is developing new programs to meet regulations that go into effect after February 1, 2004. These programs will be outlined in next year's catalog.

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.

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 masters 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.

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 32 points of course work is required, plus an integrative essay written in the final semester. (The pre-service program requires a 36-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 32point requirement. Only 8 points earned in this Department as a non-degree student may be included in the 32. 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 disciplines at Teachers College and elsewhere within Columbia University. Appropriate allocation of professional education courses is recommended also required to meet 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 pre-service 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

Other requirements that must be met before graduation include: (1) a passing score on the New York State Teachers Examinations: Liberal Arts and Science Test (LAST) and the Secondary Assessment of Teaching Skills-Written (ATS-W), (2) attendance at two State approved sessions; Child-Abuse and Substance Abuse, (3) successful completion of a course in multicultural education, (4) for those students wishing certification in New York City, 3 credits in special education, and (5) completion of MSTC 4041, Science safety workshop (0).

Preservice Science Education M.A. applicants may refer admissions questions to Professor Keith Sheppard (212) 678-3425, sheppard@exchange.tc.columbia.edu.

Master of Science and Master of Education

The Science Education program offers curricula leading to a Master of Science (M.S.) degree and a Master of Education (Ed.M.) degree. Both programs require a minimum number of graduate points of course work and a master's paper (see below). The master's paper for either degree does not carry graduate credit but students can register for 1 or 2 credits of independent study (MSTC 4900) as a method of allowing time to work on the paper.

The M.S. and Ed. M. degrees require a program planned in consultation with an advisor who may also sponsor the master's paper. The M.S. degree requires more science subject matter course work than the Ed.M. degree, while the Ed.M. degree requires more intensive work in education including science education. The M.S. degree is recommended for science educators who want a pro-

fessional 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 study to some depth in science, work in the candidate's specialization, and the development of some competence in method of scholarly analysis. Credit obtained in either program may be applied toward the Ed.D. when the candidate shows clear promise of success in further graduate studies and scholarly analysis.

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 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's Paper
For the M.S. and the Ed. M.
degrees in the Science Education Program, a master's paper

will be required. This paper 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. The 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, as a compliment to the Ed.D. dissertation which may be more educationally oriented.

The Ed.M. thesis 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 college-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 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.

In planning a program of study, it should be noted that doctoral students are required to complete a minimum of twenty points *after* taking the certification examination for the first time, including points taking during the term in which that examination is taken.

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.

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. Stu-

dents are required to complete a minimum of twenty 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. The certification exam includes one takehome exam that focuses on a key area of study in science education, one take-home exam that focuses on the student's area of dissertation study, and an oral component that focuses on their written exams.

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, foreign language requirement, 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. Science Education is both the major field and the area of specialization for the Ph.D. in the Department of Mathematics, Science and Technology.

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 of "R" will be credited. In most cases these courses will be taken in the Graduate Faculties.

In total, a minimum of 75 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, 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 thesis 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, Angela Calabrese-Barton, Elaine V. Howes, 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 Course Schedule Booklet 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 pre-service science students.

MSTC 4007. Urban Science Education 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 research-based and fieldbased experiences.

MSTC 4008. Urban Science Education 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, and 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 child-hood education (2–3)
Faculty. Corequisite: MSTC 4140. Introduction to the creation of science curriculum and instruction that attend to current state and national standards. Based in constructivist perspectives and the goal of teaching science well with

MSTC 4042. Multicultural science education as content and pedagogy (3)

all children.

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 5042. Science, technology, and society (3) Faculty. The nature and interrela

Faculty. The nature and interrelationships of science, technology, and society as represented in policy and curriculum for education.

MSTC 5048. Curriculum and pedagogy in science education (3)

Faculty. This course offers students in the science education doctoral and advanced masters 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 5046. Science teacher education (3)

Faculty. MSTC 5046 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. Students outside of the science program may take it with the professor's permission.

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) Professor Anderson and Mr. Covotsos. Theoretical basis of secondary school science education and its practical application to biology 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 4051. Modern concepts in protozoan biology (2–3) Professor Anderson. The physiological ecology and life history of free-living and parasitic protozoa.

MSTC 4052-4053. Plant biology

• MSTC 4052. Plant biology (2–3)

Professor Anderson. Introduction to plant physiological ecology with an emphasis on global systems. Laboratory sessions to be announced.

• MSTC 4053. Plant biology II

Professor Anderson. Prerequisite MSTC 4052 or equivalent. Major organizing principles and experimental evidence in plant physiological ecology including laboratory investigations suitable for secondary school and college curricula.

MSTC 4054. Human anatomy and physiology (3)

Professor De Meersman. 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 4056-MSTC 4057. Earth science

- MSTC 4056. Earth science I: space and sky (3) Study of models of our planet, Earth in Space, and Weather and Climate.
- MSTC 4057. Earth science II: materials and processes (3)
 Study of Earth materials and processes shaping the surface, interior, and geologic history of the Earth.

MSTC4059. 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 under-

MSTC 5046. Advanced chemistry methods and curriculum laboratory (3)

standing the nature of science?

Faculty. Permission required. Prerequisite: MSTC 4046 or equivalent. Individualized work with advanced topics from secondary chemistry curricula, stressing laboratory activity.

MSTC 5052-MSTC 5053. Biochemistry and cell biology (2–4) Professor Anderson. Prerequisite: organic chemistry. Autumn: Modern advances in biochemistry including molecular genetics and metabolic pathways. Spring: Specialized topics in biochemistry and cell biology. Additional lectures on advanced topics for 4th point.

MSTC 5055. Electron microscopy (2–3)

Professor Anderson. Enrollment limited. An introduction to theory and practice in scanning and transmission electron microscopy.

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) Professor Anderson. Permission required. Recommended: MSTC 5052 or MSTC 5053. Laboratory techniques used in biochemical cellular biology, emphasizing experiments that can be adapted for secondary school biology courses.

MSTC 5552. Protozoan biology seminar (2–3)

Professor Anderson. Prerequisite: MSTC 4051. Investigations of broad contemporary issues in protozoan biology, including cellular physiology, molecular biology, physiological ecology, nutrition, and behavior.

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 doctoral students. Guided field experience in supervising student teachers.

MSTC 6401. Internship in science education (1–6) Faculty. Permission required.

Supervised intern service in a variety of field settings including classroom teaching at various levels, supervision, curriculum development, and in-service education.

Independent, Advanced and Dissertation Study

MSTC 4902. Guided study in science education (1 or more) 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 or more)

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 (0–3) 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 catalog 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.

Chair: Professor Charles C. Harrington
Location: 213 Main Hall
Telephone Number:
212-678-3258
Fax: 212-678-3937
Telephone Number for
Admission Inquiries:
212-678-3710
Web Address:
http://www.tc.columbia.edu/
academic/o&ldept/

Programs:

Adult Learning and Leadership (ALL):

Adult Education Guided
Intensive Study (AEGIS)
Adult Education and Organizational Learning
Healthcare Human Resources

Education Leadership:

Education Leadership
(including Private School
Leadership)
Inquiry in Education Leadership Practice
Education and Management (a joint degree program with the Columbia Business
School)

Higher and Postsecondary Education

Politics and Education

Nurse Executive

Social-Organizational Psychology

Faculty:

Professors:

Darlyne Bailey
W. Warner Burke
Charles C. Harrington
Jeffrey Henig
L. Lee Knefelkamp
Henry M. Levin
Arthur Levine
Victoria J. Marsick
Anna Neumann
Craig E. Richards
Elaine L. Rigolosi

Professor of Practice:

Irving Hamer Thomas Sobol

Visiting Professor:

Robert Monson

Adjunct Professors:

Stephen D. Brookfield Tara A. Cortes Paul J. Edelson Keville C. Frederickson Joseph N. Hankin Ruud van der Veen Rita Reis Wieczorek

Associate Professors:

William J. Baldwin Caryn J. Block Kevin Dougherty Jay P. Heubert Pearl Rock Kane Debra A. Noumair Margaret Terry Orr Cheri Ostroff Elissa Perry Patricia Raskin Lyle Yorks

Research Associate Professor:

Martha Gephart

Adjunct Associate Professors:

Susan K. Boardman Celeste Coruzzi Joseph d'Oronzio Philip E. Fey William H. Johnson Joann Pietro Michael Rebell Marvin Sontag

Assistant Professors:

Gregory M. Anderson Peter T. Coleman Luis Huerta Lisa Ann Petrides Janice Robinson Dorothy Shipps James D. Westaby

Lecturers:

Jeanne E. Bitterman Jennifer Parlamis

Instructors:

David Buckner Loretta Donovan Jeff Kuhn Mary Price Jo Tyler

Adjunct Assistant Professors:

Isora Bosch Sarah J. Brazaitis David X. Cheng Monica Christensen Christine Coughlin Mary Jane Eisen Beverly Falk Charles W. Fowler Virginia G. Gonzalez Wendy Heckelman Michael T. Koski Arthur M. Langer Georgenne G. Lasko-Weisenfeld Barbara Macaulay Gibran Majdalany Sheila O. Melli Susan Meyer Lucienne Muller Sheri Ranis Linda Richter Vincent Rudan Sandra V. Sandy Richard E. Segal Franceska Blake Smith Barbara V. Strobert Ross Tartell Amy Titus Marie P. Volpe

For information about faculty and their scholarly and research interests, please refer to the "Faculty" section of the Catalog.

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 education, adult education, health administration, organizational behavior, and organizational develop-

ment and change. We educate, train, and serve:

- (1) leaders, managers, and administrators for all types of organizations, with an emphasis on educational 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, organizational behavior, learning, and change.

To accomplish this mission the Department provides programs in adult learning, education leadership, nurse executive, higher education, and social-organizational psychology.

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 twocourse 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.

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.

ORL 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.

ORL 5521. Introduction to research methods in education (3)

Professors Knefelkamp, Neumann, Richards, 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 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 6500. Qualitative research methods in organizations: design and data collection (3) Professors Orr and 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. 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)
Professors Orr and Sobol. Techniques and methods of preparing and analyzing case studies of organizations and institutions.

The research course requirements are summarized in the grid adjacent.

The grid on the following page lists the seven research designs and options for courses in methodological design and data analysis that are appropriate for each type of methodology.

Adult Learning and Leadership

(Code: TDA—M.A., Ed.M., and Ed.D.) Adult Education and Organizational Learning Healthcare Human Resources

(Code: TDS—Ed.D. AEGIS program)
Adult Education Guided
Intensive Study (AEGIS)
Program Coordinator: Professor
Victoria Marsick
For Admission inquiries:
212-678-3710
Program Office: 212-678-3760

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

Special Application Requirements/Information: Adult Education and Organizational Learning 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 for the concentration in adult education and organizational learning are appropriate for professionals who are involved in policy development, strategy, change management, and systems-level learning. The program prepares educators who work with the following groups:

- Leaders who shape adult education policy and program development, as well a 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.

General Research Requirements for the Department of Organization and Leadership						
Requirements	Degree program	Course Options	Requirement rationale			
Overview research methods course	M.A., Ed.M., ED.D.	ORL 5521 Research methods in education (for students with applied research interests) <i>or</i> ORLJ 4009 Understanding behavioral research (for students with a psychological orientation)	This course is to give students an overview of various modes of research and provide them with basic research literacy for reading professional journals and research reports.			
Introductory statistics course	ED.D.	HUDM 4120 Basic concepts in statistics	This course is to give students a basic understanding of statistics and a capacity to read and interpret statistical research findings.			
Methodological research design (design and data collection strategies)	ED.D.	Students are to pick one research design course based on the methodology that is appropriate for their dissertation topic (among seven options).	This course is to train students in research conceptualization, design and related data collection strategies for one mode of research. Students are to select from among seven research modes.			
Methodological data analysis	ED.D.	Students are to take one data analysis course that is appropriate for their research design and data collection.	This course is to support students in subsequent data collection, data analysis and reporting. It is a follow-up course to the research design and data collection course. Students cannot take this course without completing appropriate course requirements.			

Applicants for these degrees, with a concentration in Adult Education and Organizational Learning need to submit an academic writing sample if they are applying for the Ed.M. or Ed.D. degrees, are encouraged to arrange an interview, which in some cases, may also be required, and do not need to submit MAT or GRE scores. 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 this requirement by writing a paper that follows the guideline laid out below.

Academic Writing Sample for Concentration in Adult Education and Organizational Learning Adult educators are faced with many challenges in the organizations, communities, and societies in which they work.
These challenges 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
- working with populations that have challenges with English as a first or second language

In a well-constructed essay of 10-12 double spaced pages, identify and discuss a challenge that you face in your practice with adult learners in light of selected literature. Your essay should do 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
- Identify and relate your discussion to selected relevant theories and research to build your argument

Pay attention to factors that underlie your thinking and judgements 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.

Healthcare Human Resources

Applicants for Ed.M. and Ed.D. degrees, with a concentration in Healthcare Human Resources, must meet the same requirements listed under the Program for Nurse Executives.

Recommended Doctoral Research Design, Data Collection and Analysis Courses Department of Organization and Leadership					
Methodological Design	Design and Data Collection	Data Analysis			
Experimental and Quasi- experimental Research Design	ORLJ 5040 Research Methods in Social Psychology	Advanced Statistics Courses: HUDM 5122 Applied Regression HUDM 5123 Linear models and experimental design HUDM 5124 Multidimensional Scaling and Clustering HUDM 6122 Multivariate Analysis I			
Survey Research Design	HUDF 5020 Methods of Social Research: Survey Methods HUDM 5053 Instrument Design and Validation	HUDF 5029 Sociological Research Methods in Educational Settings HUDM 5122 Applied Regression HUDM 5124 Multidimensional Scaling and Clustering HUDM 6122 Multivariate Analysis HUDF 6021 Social research methods: reporting			
Applied Qualitative Research Design (includ- ing case study)	ORL 6500 Qualitative Research Methods on Organizations: Design and Data Collection C&T 5502 (1) & (2) Introduction to qualitative research in curricu- lum and teaching	ORL 6501 Qualitative Research Methods on Organizations: Data Analysis and Reporting			
Ethnography	ORL 5000 Methods of Inquiry: Ethnography and participant observation	ITSF 5001 Ethnography and participant observation: Structural and Interpretive analysis ITSF 5002 Ethnography and participant observation: comparative and qualitative analysis			
Evaluation	HUDM 5055 Evaluation of Institutions, programs and curricula HBSS 6100 Measurement and program evaluation HUDF 5021 Methods of social research: evaluation methods ITSF 4092 Qualitative research and evaluation in international education	HUDM 5056 (continuation)			
Historical Research	A&HF 6041 historical method				
Action Research	ORLA 5530 Action Research	(to be selected based upon qualitative or quantitative focus)			

AEGIS Doctoral Admissions Application Essay

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 complimentary? 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?

Aegis

The Doctor of Education, AEGIS track is designed for experienced, self-directed professionals capable of completing a rigorous program emphasizing guided independent study. Students must complete 40 transferable credits from previous successful graduate study prior to beginning the program. The applicant's personal statement must document 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.

Other requirements for admission include a professional resume indicating several years of experience in program development or administration of adult education, counseling, staff development, or training. In addition a proof of access to a university library, a sample of academic writing (preferably from work in an academic program), and an application essay (see box entitled "AEGIS Doctoral Admissions Application Essay") are also required. The

application essay should not exceed ten double spaced pages. If the application materials are acceptable, applicants will be invited to campus for an interview. They will also be asked to complete a second on-site writing assignment at that time.

For the AEGIS track, early admission decisions are made in December of the year preceding the beginning of the program. Applicants who want to be considered for an early admission decision should make sure that their materials are submitted by 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.

Program Descriptions:

Adult Learning and Leadership

The intellectual framework in the programs of Adult Learning and Leadership (ALL) examines the relationship of adult learning to organizational, management, and leadership issues that are relevant for both concentrations. The framework prepares individuals as leaders, managers, and facilitators of learning in relationship 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. Ways in which individual learning can be supported, nurtured, shared, and utilized by larger social units in today's knowledge society is also a focus.

Lifelong learning for adults is an increasingly important educational specialization in the 21st century. The massive economic, political, social and psychological changes that are transforming the nature and structure of virtually all institutions in society have rendered obsolete the notion that

people can be adequately educated, once and for all, in their youth. In addition, the challenges faced by adults today call for changes in our social, economic, and political systems. Decision makers must recognize the limitations of programming solely within institutions, and help to create bridges to strengthen organizational and national capacity.

The 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-for-profit or public sectors
- religious and communitybased organizations
- basic education classes (literacy, General Education Diploma)
- returning adult students with specialized needs in postsecondary education
- continuing professional education

Healthcare Human Resources

The specialized concentration in Healthcare Human Resources would appeal to professionals in nursing, social work, nutrition, extended nursing care, law, and medicine who are seeking leadership and learning positions.

	M.A.	Ed.M.	Ed.D.
Required Core			
Courses	21 points	27 points	30 points
Required			
Research			
Sequence	3 points	6 points	18 points
Required			
Contextual			
Concentration			
Courses	15 points	18 points	18 points
Elective Course	6 points	9 points	24 points
TOTAL	45 points	60 points	90 points

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 nonprofit 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 people-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.

Doctor of Education (AEGIS)

AEGIS is a highly selective, fast-track cohort program leading to the Ed.D. in Adult Learning and Leadership 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.

Degree Requirements:

The M.A., Ed.M., and Ed.D. programs are structured around core courses, a core research sequence, concentration courses, and electives. The following matrix shows the area for each degree.

The core courses are designed to develop professional capabilities for students in Adult Learning and Leadership in either of the two contextual specializations (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 from courses identified in the following section 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 in each of these seven areas no matter what the degree level. Most courses are offered by the program; several are offered in the Department; and in the

case of technology, students usually take courses in other departments at the College.

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):
- ORLD 5054 Strategy development as a learning process in organizations, or courses available elsewhere at the College or Columbia University.

Adult Learning (minimum of 3 points):

- ORLD 4053 Facilitating adult learning, or
- ORLD 4051 How adults learn

Human Resource Development (minimum of 3 points):

- ORL 4011 Personnel management in healthcare organizations, or
- ORLD 5055 Staff development and training, or
- ORLD 5062 Human resource development in organizations, or
- ORLJ 5003 Human resource management

Group Dynamics (minimum of 3 points):

- ORLA 5017 Groups and interpersonal behavior, or
- ORLJ 5017 Small group intervention: theory and method

Organizational Behavior (minimum of 3 points):

- ORLA 4010 Organizational behavior and change, or
- ORLJ 4005 Organizational psychology, or
- ORLJ 5014 Organizational dynamics and theory

Technology (minimum of 3 points):

New courses are being developed in Technology-Supported Learning and in Technology and Management/Information Systems. Technology-related courses are also available elsewhere in the College. For example:

- MSTU 4022 Telecommunications, distance learning, and collaborative interchange
- MSTU 4030 Computer applications in education
- MSTU 4031 Programming I
- MSTU 4032 Hypermedia and education
- MSTU 4083 Instructional design of educational technology
- ORLN 5013 Informatics in nursing

Required Core Research Sequence (3 to 18 points)

M.A. (minimum 3 points):

- ORL 5521 Introduction to research methods in education, or
- ORLJ 4009 Understanding behavioral research

Ed.M. (minimum 6 points): In addition to one of the above listed courses, M.Ed. students must take a statistics course from those listed below.

Ed.D. (minimum 18 points): At the Ed.D. level, students 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 the following courses.

- HUDM 4120 Basic concepts in statistics
- HUDM 4122 Probability and statistical inference
- HUDM 5122 Applied regression analysis
- HUDM 5123 Linear models and experimental design

DEPARTMENT OF ORGANIZATION AND LEADERSHIP

- 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
- ORL 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

Required Contextual Concentration Courses (15 to 18 points)

Concentration courses differ by degree area and within each of the two areas of specialization, that is, Adult Education and Organizational Learning or Healthcare Human Resources. Areas within which concentration courses are offered are identified in the following sections.

Adult Education and Organizational Learning: Contextual Concentration Courses

Adult Development Theory and Applications

• ORLD 4051 How adults learn

Adult Learning Theory and Applications

- ORLD 4050 Introduction to adult education
- ORLD 5057 Adult learning and education theory and practice

Systems Learning Theory and Applications

 ORLD 5819 Workplace Learning Institute: Towards a learning organization—The

- social dimensions of largescale change
- ORLD 5061 The learning organization
- ORLD 5065 The learning society

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 5304 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 and mediation, Section I
- ORLJ 6350 Advanced practicum in conflict resolution and mediation, Section II: designing conflict management systems

Healthcare Human Resources: Contextual Concentration Courses

Healthcare Law

- ORL 4014 Legal issues in healthcare organizations healthcare policy and analysis
- ORLN 6014 Managing the socially responsible organization
- ORLN 6522 Policy formation and governance in nursing ethics
- ORL 5551 Ethics for healthcare professionals marketing
- ORLN 6514 Marketing nursing programs and services accounting and finance
- ORLN 4013 Fiscal management of the nursing organization adult learning
- ORLN 5530 Seminar: clinical teaching and evaluation
- ORLN 6511 Innovations in nursing management

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 at least two courses in any degree program outside of our immediate program area to satisfy the Teachers College breadth requirement.

Students in the M.A. and M.Ed. programs are required to complete either an integrative project, or pass a comprehensive examination. Students in the Ed.D. program are required to pass a certification examination and to write and successfully defend a dissertation.

Doctor of Education, AEGIS track

Course work is completed over a two-year period. Participants attend a concentrated threeweek 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. Missing a class is an automatic stop out of the cohort program until the next cycle. Courses are not open to students from other programs. Special tuition: \$8,000 per semester. Tuition is subject to change.

AEGIS students earn 50 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.

AEGIS COURSE SCHEDULE

First Year:

Summer (Three week session)

- ORLD 6906 Program development (3)
- ORLD 6800 Life history (2)
- ORLD 6902 Proseminar in adult education (3)

Autumn

- ORLD 6908 How adults learn (3)
- ORLD 6800 Literacy & adult basic education (1)
- ORLD 6918 Introduction to research (3)

Spring

- ORLD 6904 Advanced adult education theory (3)
- ORLD 5065 The learning society (1)
- ORLD 6803 Qualitative research (3)

Second Year:

Summer (Three week session)

- A&HF 4061 Introduction to cultural studies
- HUDM 5021 Empirical research (3)
- Workshop: Certification Exam Preparation (0)

Autumn

- A&HF 4084 Social philosophy and education (3)
- ORLD 6800 Social action (1)
- ORLD 6918 Advanced research (3)
- ORLD 6914 Action research/action learning/collaborative inquiry (2)

Spring

- ORLD 6908 Advanced seminar: leadership in adult education (3)
- ORLD 6800 Workplace learning (1)
- ORLD 6918 Advanced research (3)
- ORLD 6914 Technology & learning in adult education (2)

Third Year:

Summer

- ORLD 6918 Advanced research (2)
- ORLD 6914 Directed dissertation research (2)
- ORLD 6800 Review of learning experience (capstone) (0)

Fall and Spring

- ORLD 7900 Dissertation seminar
- ORLD 8900 Continuous dissertation advisement

Note: After completion of course work in the third summer, students must enroll in ORLD 7900 Dissertation Seminar until their dissertation proposal is defended and filed with the Office of Doctoral Studies. ORLD 7900 is a seminar that meets on AEGIS weekends for additional guidance in their research. Following the filing of the dissertation proposal, candidates must enroll in ORLD 8900 Continuous Dissertation Advisement, up to and including the semester in which the oral defense is held, and major revisions are made on the document, as recommended by the Dissertation Committee. ORLD 8900 does not involve class meetings. Alternatively, students can continue to enroll in ORLD 7900 as it fits their needs for continuing progress toward completion of the dissertation.

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)

Professor Knefelkamp, 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 and Professor Marsick. 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 infield project, insight into contextual approaches to literacy and the myths surrounding illiteracy may be gleaned.

ORLD 4500. Special topics in higher and 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 (0–3)

Faculty. Special topics or events related to the administration of programs of higher or adult education. Topics change each semester. Open to degree and nondegree 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 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 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.

ORLD5054. 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)

Faculty. 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)

Dr. Muller. An 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

Professor Marsick. Prerequisite: ORLD4050, or ORLD4051, or ORLD4053. Advanced seminar in theory development through a synthesis of the writings of selected philosophers, social scientists, and educators. History and transformation of adult education philosophy and theory; cultural, social and political contexts of theory-building; critical analysis of the main schools of thought; discussion of new challenges to adult learning and education theory (social learning, organizational learning).

ORLD 5061. The learning organization (3)

Professor Marsick. This course describes theory and practice in creating learning organizations. In depth attention is given to action science as a framework for organi-

Doctoral Admissions Application Essays

Please write two essays of no more than 500 words each from among the three possible topics below:

- 1. Summarize the leadership activities in which you have been involved in recent years and explain how these experiences reflect your vision of and capacity for leadership.
- 2. Please identify a problem or challenge in a school, school-related organization, or your professional life generally and write an analysis in which you assess the issue(s), describe effective strategies for addressing the issue(s), and make clear the implications for the exercise of effective leadership in the situation.
- 3. Please describe a problem of educational policy development, policy decision-making, policy content, or policy implementation, and explain how a deeper understanding of policy or the policy process could improve the situation.

zational learning. Readings and case studies provide insight into learning at individual, group, and organizational levels. ORLD 5055 or its equivalent is a prerequisite.

ORLD5062. 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: ORLD5055 or ORLJ5003 (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 5819. Workplace Learning Institute—Towards a learning organization: The social dimensions of large-scale change (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 6550-ORLD 6551. Advanced seminar in higher and 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 7500. Dissertation seminar in higher and 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 4900. Research and independent study in higher and adult education (2 or more).

ORLD 5900. Research in higher and 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 6557-6558. Research practices in higher and adult education Faculty.

ORLD 6900. Research and independent study in higher and adult education (2 or more) Permission required.

ORLD 7900. Directed dissertation proposal seminar (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 7500. Directed dissertation proposal seminar (1) Students register for the course the semester a proposal hearing is to be scheduled.

ORLD 8900. Dissertation advisement in higher and 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.

For Healthcare Human Resource course descriptions, see the Program for Nurse Executives listing.

Education Leadership

(Code: TA)
Education Leadership
(including Private School
Leadership)
Inquiry in Education Leader-

ship Practice Joint Degree Program in Education and Management

Program Coordinator: Professor Jay Heubert

Telephone: (212) 678-3775; Fax: (212) 678-4612 E-Mail: jh613@columbia.edu Admission Inquiries: (212) 678-3710
Program Office: (212) 678-3726 and (212) 678-3139
Web Site: http://www.tc.
columbia.edu/academic/o&ldept/
edadmin/edadminhome.asp
(Certain forms referenced
below maybe downloaded from
the Web site.)

Degrees Offered:

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)
Joint Degree Program
(Ed.D./M.B.A.)

Concentrations Offered:

Public School Leadership
Public School and School District Leadership (NYS certification) (M.Ed., Ed.D.)
Inquiry in Education Leadership Practice (Ed.D.)
Education Leadership
(non-certified) (M.A., M.Ed., Ed.D., Ph.D.)
Private School Leadership
Education Policy and Politics
Education and Management
(Ed.D., MBA)

Special Application Requirements/Information:

Applicants must specify the degree, program, program code, and concentration of their choice on the application for admission.

Either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) 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 concentration on Public School and School District Leadership should have at least three (3) years of teaching and/or administrative experience in the public schools (N–12).

Applicants to the Ed.D. program, Inquiry in Education Leadership Practice, must have completed 40 graduate credits with a B average or better to be eligible for consideration.

Applicants to either the M.A. or Ed.M. program in Education Leadership with a concentration 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 Admission. Please send the fellowship application to the Klingenstein office by January 15th and the Teachers College application to the Admissions Office by January 15th.

Only Ph.D. applications that are complete and have been received by the Admissions Office by December 15, and Ed.D. applications that are complete and have been received by the Admissions Office by January 2nd will be considered. Late applications may be considered for admission the following year. In addition to the requirements outlined in the application instructions, the GRE General test or MAT test results, and a personal statement of intention to study full or part time, all doctoral applicants must submit two doctoral application essays chosen from the three suggested topics in the box above.

All master's applications (M.A., Ed.M.) in Public School and School District Leadership, Education Leadership, or Education Policy and Politics that are complete and have been received by the Admissions office by January 15 will be considered for both admission and any available scholarship

aid. A second round application date for master's applicants is April 15th. All complete applications received by April 15th for the master's program will be considered for admission only.

Applicants to the joint M.B.A./Ed.D. program in Education 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. The Business School requires all applicants to take the GMAT exam. Applicants may submit the GMAT to Teachers College in lieu of the GRE or MAT test.

Special Note: Degree applicants are required to verify professional 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.

Program Description:

The concentrations in education leadership prepare students for careers as successful scholars and practitioners capable of leading and transforming a wide variety of educating organizations.

Graduates serve in leadership positions as school and school district administrators, policy analysts and advocates, and scholars of education and education leadership. They are equipped to lead educational practice; to influence political systems, education law and education policy; to apply the methods of social science research to the conduct of inquiry; and to seek quality, equity, and diversity in education. To prepare themselves to serve effectively, they:

 Become thoroughly grounded in the theory and practice of educational 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
- Exhibit the courage and refine the critical intelligence needed to question what is and develop what might be.

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 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 Educational Leadership, the Department of Organization and Leadership, and Teachers College Columbia University.

The Education Leadership faculty offers these routes to the following degrees:

Public School and School District Leadership (NY State certification) (Ed.M., Ed.D.) (Code: TA)

This concentration prepares students for positions of leadership within the public schools, such as principal, director, assistant superintendent, and superintendent of schools. It also provides certification as School Administrator and Supervisor and/or School District Administrator in New York State. It prepares committed men and women for lives of leadership and service in educating institutions of all kinds. 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.
- 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. It also entails study of the intellectual history of American education, theory

and practice of school reform, principles of education law, and research in educational administration (usually conducted in field settings of the student's choice). A formal dissertation focusing on a topic of professional concern is required.

Candidates should have at least three years of teaching and/or administrative experience in the public schools. *Contact: Professor Terry Orr* (212) 678-3728.

Education Leadership (M.A., Ed.M., Ed.D., Ph.D.) (Code: TA)

This concentration 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 Administrator and Supervisor and/or School District Administrator in New York State..(Students may make individual application to the New York Office of Teaching.) 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.

Inquiry in Education Leadership Practice (Ed.D.) (Code: TAI)

The INQUIRY program offers practicing, certified school administrators an opportunity to complete a rigorous doctoral program while continuing to practice. As colleagues in a close-knit cohort, students attend classes over a two-year period, working in teams as well as individually. (Addi-

tional time is usually required to complete the dissertation.) Each year consists of five intensive seminar weekends during the fall and spring semesters and four weeks of concentrated campus-based study in July. Although the schedule differs from that of the conventional doctoral concentration in School and School District Leadership, the content, degree requirements, and standards of performance remain the same. No academic credits are awarded for work experience.

Prospective students are encouraged to apply early. Applications and all supporting documents must be received in the Admissions Office by January 2, 2002. *Contact: Professor Thomas Sobol* (212) 678-3751.

Education Leadership and Management: a joint Ed.D./M.B.A. program with the Columbia University School of Business (Code: TAA)

The joint degree program with the Graduate School of Business of Columbia University and the program in Education Leadership at Teachers College leads to the Ed.D. degree and the M.B.A. degree. This joint program emphasizes the area of educational leadership and management in a wide variety of education-related organizations. The program is designed to prepare students to assume major leadership positions in schools, universities, and other education-related organizations by improving educational practice, influencing educational programs, learning to work with complex organizations, and applying management skills to the field of education. The program will prepare the student to enter educational management in regional, state, or federal governments, research institutions, private foundations, or private sector

leadership. Contact: The Education Leadership Office (212) 678-3726 or 678-3139.

Private School Leadership (M.A., Ed.M.,Ed.D.) (Code:TA)

The Master of Arts degree with a concentration in Private School Leadership is cosponsored by the Esther A. and Joseph Klingenstein Center for Independent School Education and the Educational Leadership Program. The special features of this program include fieldwork, site visits to public and private schools and a connection to an extensive network of cooperating schools. Both the M.A. and Ed.M. programs attract national and international students. The degree focus is designed to enhance the professional careers of deans, division directors, school heads and teacher-leaders, or to prepare talented educators for such positions. Candidates must have at least three years of teaching and/or administrative experience. The Ed.D. degree builds on the sequence of courses designed for the master's degree and is individually tailored to meet department requirements and the professional interests of the student. Contact: Professor Pearl Rock Kane (212) 678-3156.

Leadership, Policy and Politics (M.A., Ed.M., Ed.D., Ph.D.) (Code: TA)

This concentration prepares students for such positions as policy analyst, policy advocate, and educational researcher. It develops students' skills in political, economic and legal analysis of educational policy issues with a focus on the role of leadership. Students are required to explore one policy topic in depth as part of a required policy field experience. Coursework also includes a research methods sequence suitable to the requirements of educational policy professionals and experience writing policy

briefs for a variety of purposes. The doctoral programs require completion of the master's core courses and are developed individually in conjunction with a faculty advisor. Contact: Professor Dorothy Shipps (212) 678-3850 or Craig Richards (sabbatical 2002–3) E-mail: cer8@columbia.edu

Degree Requirements:

Note the basic research requirements for all students in the department. All students should consult with an academic advisor to plan an appropriate academic program of study.

Master of Arts

The Education Leadership Program offers Master of Arts degrees with three areas of focus: public school leadership, private school leadership, and education policy and politics. Individual program requirements are listed below.

Public School Leadership concentration (Code: TA)

The 32 point Master of Arts with a focus on public school leadership provides a comprehensive introduction to school leadership through the practical and theoretical study of organizational behavior, leading learning, educational policy and politics, and management systems. (It does not lead to certification by New York State.) For further information on obtaining the SAS, contact the Registrar's Office (212) 678-4050. For degree information contact Professor Thomas Sobol (212) 678-3782.

Private School Leadership concentration (Code: TA)

This 32 point concentration prepares students for positions of administrative leadership within private schools and in organizations that work with private schools.

The Master of Arts degree with a concentration in Private School Leadership is supported by the Esther A. and Joseph Klingenstein Center for Independent School Education and the Educational Leadership Program. The degree concentration is designed to enhance the professional careers of department heads, deans, division directors, and school heads or to prepare outstanding educators for such positions.

This program of study includes courses in the administrative leadership of private schools, legal aspects of private school administration, financial management, marketing and research. The special features of the program include site visits to private schools and a connection with a network of cooperating schools. The degree requirements may be completed in one year of intensive study or on a part time basis. Candidates should have at least three years teaching experience. Contact: Professor Pearl Rock Kane (212) 678-3156.

Leadership, Policy and Politics concentration (Code: TA)

The 33 point Master of Arts with a concentration in education policy and politics is intended for educators and noneducators considering entry level positions in education policy or management who do not require building-level certification. The policy and politics concentration requires a sequence of courses including introductions 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. Contact: Professor Dorothy Shipps (212) 678-3850 or Craig Richards (sabbatical 2002-3) E-mail: cer8@columbia.edu

Master of Education

Sixty points (at least 30 of which must be earned at Teachers College) are offered in three areas of concentration: public school leadership, private school leadership, and education policy and politics. Course requirements for each program are as listed below.

Public School and School District Leadership concentration (Code: TA)

The 60 point Master of Education Degree with a concentration in public school leadership prepares students for positions of administrative leadership such as principal, director, assistant superintendent, and superintendent of schools. The program combines the practical and theoretical study of organizational behavior, leading learning, educational policy and politics, and management science. Attention is also devoted to four cross-cutting themes: diversity, technology, leadership, and organizational change. Students who complete the program with a minimum of 24 points in educational administration and an administrative internship or its equivalent meet the requirements for New York State certification as a School Administrator and Supervisor (SAS) and School District Administrator (SDA). Candidates should have at least three (3) years of teaching and/or administrative experience in the public schools.

Field-Based Experience Requirements: Candidates for the Ed.M. and Ed. D. in Public School and School District Leadership must meet three fieldbased experience requirements.

The first field-based requirement is a public school or district internship for a minimum of 200 hours. The internship focuses on instructional leadership and is supervised by an

approved internship mentor according to a defined set of competencies and products. Students also participate in a related internship seminar. As part of the internship, students keep a journal, prepare a written instructional leadership analysis (focusing on curriculum, instruction, supervision, and the learning environment; professional development and human resources; and student personnel services), and complete a field-based project in conjunction with the Internship Seminar.

The second is an administrative field study project. Students make in-depth visits to three schools or school districts. In each visit, students interview administrators and other staff and observe school operations on five dimensions of school administration: governance; instruction; organization; accountability; and context and community. Students prepare a written comparison of the three schools or districts on these dimensions, considering the possible effects on student equity and access, educational performance, and organizational effectiveness.

The third field field-based requirement is a collaborative policy analysis project. This project a capstone experience in the program, addresses political, community and strategic leadership issues. Students work in teams to investigate a current policy issue as it affects schools and districts. The project documents how policy moves through the educational system, from policy making to policy implementation. Each team studies the design and use of implementation strategies, the anticipated and unanticipated consequences of a policy, and/or the policy impact thus far. The project entails field research, such as formative or summative evaluation or action research, for the school or district under study. Contact: Professor Terry Orr, (212) 678-3728.

Note: in some circumstances the faculty may impose alternative field-based requirements.

Private School Leadership concentration (Code: TA)

The 60 point Master of Education degree with a concentration in Private School Leadership is supported by the Esther A. and Joseph Klingenstein Center for Independent School Education and the Education Leadership Program. The program of study is similar to all requirements for the Master of Arts in Private School Leadership with the addition of a second project. Up to 30 credits may be transferred from a recognized graduate program and students must satisfy the department's Master of Education requirements listed above.

The degree concentration is designed to enhance the professional careers of department heads, deans, division directors, and school heads, or to prepare outstanding educators for such positions. This program of study includes courses in the administrative leadership of private schools, legal aspects of private school administration. financial management and marketing, and research. The special features of the program include site visits to private schools and a connection with a network of cooperating schools. The degree requirements may be completed in two years of intensive study or on a part-time basis. Candidates should have at least three years teaching experience. Contact: Professor Pearl Rock Kane (212) 678-3156.

Leadership, Policy and Politics concentration (Code: TA)

The 60 point Master of Education with a specialization in education policy and politics is

intended for educators and non-educators seeking careers in education policy or management in either the private or public sector who do not require building-level certification. The program of study builds on the required M.A. course sequence in education policy and politics with additional work in a policy area and relevant to policy analysis. Contact: Professor Dorothy Shipps (212) 678-3850 or Craig Richards (sabbatical 2002–3) E-mail: cer8@columbia.edu

Doctoral Degrees

Doctor of Education Doctor of Education (Ed.D) degree in education leadership is offered in several concentrations: Public School and School District Leadership (TA); Education Leadership (TA); Inquiry (TAI), a concentrated, cohort program; Private School Leadership; Education Policy and Politics (TA); and the Joint Ed.D/M.B.A. degree program in Educational Leadership and Management (TAA). These doctoral programs all require 90 points for completion. A maximum of 40 transfer points may be accepted.

These 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 doctoral certification on successful completion of 60-70 points of course work, a certification process, and a sequence of approved field experiences. They must also

complete an applied research methods course sequence suited to the concentration pursued.

Thereafter, candidates complete their remaining course work while preparing a dissertation under the direction of faculty in the program. The doctoral degree in educational leadership builds competence in the areas of policy analysis, organizational analysis, management systems, and leadership. A concentration in public school leadership, private school leadership or education policy and politics is required. (Course requirements build upon M.A. concentrations, see above.)

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 students can complete the degree requirements and graduate in three to five years.

Doctor of Philosophy (Code: TA)

The Doctor of Philosopy (Ph.D.) in Educational Leadership is designed for aspiring researchers, professors, and policy analysts, emphasizing research and intensive specialization in a field of scholarship. It is a research and theoretical program which may be completed in 75 points, of which 30 may be transferred from another graduate institution. In addition to study in educational administration, the program requires preparation in one of the cognate social science faculties of the University, for example, Political Science, Sociology, or Economics. The program is intentionally research focused and theoretical. It does not attempt directly to prepare its holders to excel in the field of practice. Students who are committed to leadership in schools and other educational institutions should apply for admission to the Ed.D. program. Before making application to the Ph.D. program in Education Leadership, prospective applicants are urged to consult with *Professor Charles Harrington*, (212) 678-3313.

Non-Degree Programs

In addition to the degree programs previously described, the Educational Administration Program offers several professional development opportunities to both first-time students and to alumni interested in continuing their graduate education. These are listed below.

Education and Law

This concentration, offered jointly by Teachers College and Columbia Law School, prepares students for positions that require knowledge and skill in education and law. Formal programs are in development; students interested in ad hoc arrangements should contact *Professor Jay Heubert at (212)* 678-3775.

Klingenstein Fellows Program

Program Director: Pearl Rock Kane

The Klingenstein Fellows Program is a one-year 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 generous 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 (212) 678-3156.

Klingenstein Summer Institute

An intensive off site residential summer institute is offered for independent elementary, middle or 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 four graduate credits that may be applied toward the Master of Arts degree. Contact Professor Pearl Rock Kane (212) 678-3156.

Klingenstein Visiting Fellows Program

The Klingenstein Visiting Fellows Program is a three and half 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 seminars 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 January 15. Contact: Professor Pearl Rock Kane (212) 678-3156.

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: Center for Educational Outreach & Innovation at (212) 678-3987.

Principals Work Conference

The Education Leadership Program sponsors the Principals Work Conference through the Center for Educational Outreach, and Innovation. School leaders explore creative administrative problem-solving in terms of community building, curriculum models, school design, school-community assessment and inter-institutional relations in the context of school reform. Participants attend to current research. Contact: Center for Educational Outreach & Innovation at (212) 678-3987.

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 nomi-

nation and invitation. Contact: Professor Thomas Sobol (212) 678-3751.

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 Handbook or "Guide" (see also, Web page); and (3) their faculty advisor.

General and Research

ORL 5521. Introduction to research methods in education (3)

Professors Knefelkamp, Neumann, Richards, 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 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) Professors Orr and Sobol. Techniques and methods of preparing and analyzing case studies of organizations and institutions.

ORLA 4001. Overview of administration (3)
Professor Richards. 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 administration (1 or more) Permission required from individual faculty. Special individualized work.

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 grad-

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 organization and leadership (3) Permission required. Individualized internships for students. Internship in schools 20 hours per week.

ORLA 6500. Program leadership: design and evaluation (3) Professor Kane. The administrative responsibility in professional development, job restructuring, faculty motivation, and participative decision making.

Colloquia in educational 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 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)

Professor Orr, Professor Shipps. Permission required. ORLA 6900. Research and independent study in educational administration (1 or more). Special individualized work. Permission required.

ORLA 7500. Dissertation seminar in educational leadership (1–3)

Professor Richards. 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. Use section numbers of ORLA 4900.

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.

ORLA 9900. Research and independent study in educational leadership (1 or more) For post docs only.

Leading Learning

ORLA 4031. Leadership of early childhood education (3)
Faculty. The instructional program, school organization, public policy, staff personnel, funds, and facilities from the perspective of the early childhood education program leader.

ORLA 4033. Leadership of secondary schools (3)

Faculty. Organizing and administrating schools as institutions; comparative study of school designs in context; governance and decision making; community building, change and reform; teaching and support services.

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 (3)

Faculty. Collaborative field study of transformation process within specific urban/suburban systems. Focuses on leadership for creating institutional cultures incorporating community building and national calls for new standards of student learning.

ORLA 4045. Restructuring schooling in urban environments (3)

Professor Shipps. 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 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 (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, within the context of private schools, 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 5052. Program leadership (2–3)

Faculty. Focuses on dilemmas facing institutional leaders in an effort to promote reflection-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. Leadership and institutional analysis: the community and program development (2–3)

Faculty. 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. A comprehensive examination of contemporary educational issues in public and private schools to provide a context for analyzing and understanding teaching and learning in independent schools in broader perspective. Readings, discussions, and site visits.

ORLA 5820. Principals Work Conference (Noncredit or 1) Faculty. Developed in conjunction with an advisory board of principals. School leaders will explore creative administrative problemsolving in terms of community building, curriculum models, school design, school-community assessment, and inter-institutional relations in the context of school reform. Participants will attend to current research. A second point of credit can be earned by registering for ORLA 4900. Meets for three days in early June.

Organizational Behavior

ORLA 4010. Introduction to organization and change theory in education (3)

Professor Orr. An introduction to various psychological, sociological, and cultural perspectives on organizational behavior and their application to organizational problems.

ORLA 4011. Behavior in organizations (3)

Professor Orr. Psychological, social, and cultural factors in the establishment and development of educational organizations.

ORLA 4030. Ethical issues in educational leadership (3) Professor Sobol. 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

sis 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

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)

Faculty. This course provides an opportunity for students who want

to explore theory and experience of leadership, authority, and change. The course examines the conscious and unconscious dimensions of group and intergroup dynamics with a focus on reflective practice and professional development for change and growth. Special Permission required. Special fee: \$50.

ORLA 5049. Program leadership in multicultural settings (3) Faculty. In-depth exploration of multiple aspects of the practice of reflective leadership in multicultural milieu. Includes collaborative action research and conflict resolution training.

ORLA 5054. Program leadership: advanced cases and concepts (3)

Faculty. Emphasizes application of analytic frameworks to the development of schools in their social context. Focuses on the advocacy design process in actual urban settings. Site visits and writing of case studies.

ORLA 5530. Action research in organizational behavior (3) Professor Orr. 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.

ORLA 6610. Colloquium in managerial behavior (3) Faculty. Permission required. Emphasis upon classic studies and analysis of the implications of

research for organization theory and administrative practice.

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 educationrelated information systems in 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 problemsolving 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 4055. Economic concepts, the administration of educational institutions and policies (3)

Faculty. Course concepts include: the economic value of education to society, the economy, and individuals; theories on the linkages between education and income; the interplay of physical, human and social capital; educational production functions and allocative efficiency; cost benefit and cost effectiveness analysis in education; the distribution of education among competing groups and individuals; teacher markets and salary determination; and educational planning.

ORLA 4062. School business administration: non-public schools (3)

Professor Richards. Emphasis on non-public schools. Introduction to school business administration including an overview of accounting, financial planning, budgeting, scholarships, endowments, capital planning, salaries and pensions, and cash management.

ORLA 4820. Summer institute in 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 based-policy 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 non-profit 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 information-based systems into knowledge-based systems. Emphasis is also placed on understanding the environmental system in which the organization exists. Special fee: \$50.

ORLA 5021. Management science (3)

Faculty. Prerequisite: ORLA 4021 or permission of instructor. Allocation and predictive models for management. Principles and applications of decision and utility theory. Economic and cost-benefit analysis and linear programming. Utilization of smoothing, regression, and simulation techniques for planning and forecasting.

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 5027. School fund accounting (3)

Faculty. Prerequisite: ORLA 4025 or equivalent. Examination of the basic mechanics of financial accounting for public school systems. Managerial uses of accounting for providing internal control and information for decision making are also explored.

ORLA 5050. Program leadership: grant funding workshop

Dr. Segall. Use of word processor, spreadsheet, and database to create actual federal grant proposal appropriate to work site. Dual focus on learning application and development of funding proposals as planning documents. Special fee: \$10. *Computer Lab mandatory for second bour of class.

ORLA 6019. Labor management relations in education (3) Faculty. Enrollment limited. Negotiations as administrative process for decisions and management of patterns of remuneration and conditions of work. Cases and simulation. Special fee: \$30.

ORLA 6020. Seminar in management systems (3)

Faculty. Permission required. Intensive study and field-based activities related to information systems and to school business administration topics. Students complete individual projects in conjunction with administrators from public or private organizations.

Policy Analysis and Action

ORLA 4040. Education policy decision making (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)
Professor Sobol. 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.

DEPARTMENT OF ORGANIZATION AND LEADERSHIP

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) Professor Shipps. 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 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. Discussions focus on how various forms of choice fit with the democratic ideal of education and who stands to benefit or lose from the various forms of school choice.

ORLA 4086. Law and educational institutions: Issues of authority, religion, free speech, and safety (3)

Professor Heubert. 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 5012. Community politics, community policies, and administrators (3)

Faculty. Political analysis of administration at the service delivery and community levels.

ORLA 5016. Law and educational institutions: Equity issues

Professor Heubert. This course focuses on issues of equal educational opportunity. Topics include desegregation; bilingual education and other services for English-language learners; 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 5046. School finance: resource allocation (3)

Faculty. In-depth analysis of factors affecting the cost and quality of educational services within districts and within states. Examination of methods to improve equity and efficiency in the allocation of resources. Special fee \$10.

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 nonschoolbased educating institutions.

ORLA 5544. Current topics in policy analysis for administrators (3)

Faculty. Collaborative work groups on topics such as media and education, telecommunications, and the role of entertainment industries. Especially appropriate for clinical projects and/or exploration of dissertation topics.

ORLA 5645-ORLA 5647. Topics in policy planning and implementation:

• ORLA 5645. Intergovernmental relationships (3) Faculty. Intergovernmental relationships, program assessment including national standards, program development cycles and leadership implications.

• ORLA 5646. Concepts and techniques (3)

Professor Sobol. Concepts and techniques of policy planning and implementation analyzed through theoretical readings and case studies at local, state, and national levels. Cases are drawn from both education and other spheres of public administration.

• ORLA 5647. Effective

schools (3)
Faculty. Examination of suggestions by various authors of critical features and elements that make schools effective.
National, state, and organizational reports, as well as individual authors will be studied.

• 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 (4) Professor Shipps. 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 Postsecondary Education

(Code: TDN) Program Coordinator: Professor Anna Neumann

For Admission inquiries: 212-678-3710 Program Office: 212-678-3750 Web Site: http://www.tc.columbia.edu/ academic/o&ldept/highered/ hedhome.asp Degrees Offered:
Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)

Special Application
Requirements/Information:
Applications are considered for fall enrollment only.

Applicants to all degree levels should address 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 master's level class.

Ed.M. applicants must have an M.A. in a relevant discipline or field. Relevant work experience is also helpful.

Doctoral applicants should have a master's degree in a relevant discipline or field and work experience in higher/ post-secondary education.

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; social and comparative perspectives, with attention to the social, cultural, economic, and historic 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 and deeply 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 along with its developing strengths in the exploration of academic learning and development. They will also build on the program's growing capacities in higher/postsecondary education policy, social thought, and comparative analysis, as well as on the department's highly regarded offerings in organizational studies. As such, students earning the M.A. degree will be positioned to serve in a variety of academic support and college/student-life 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 encouraging emphasis in 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 domains, alone and in combination, to elaborate and deepen their experience-based knowledge and intellectual interests in particular practices such as 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 analytically-oriented 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 bevond 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 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 that frame understandings of the enterprise—its educational and intellectual core, its institutional/organizational rubrics, its social and comparative contextualizations—and thus, through their own research (situated within a concentration or emphasis area), they participate in a focused reshaping of those understandings. 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 a particular 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. As such, graduates of the Ed.D. Program may become policymakers and eval-

uation 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 college-wide instructional development centers and activities; they may become academic scholars and researchers.

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:

- ORLD 4010 Purposes and policies of higher education (3)
- ORLD 4011 Curriculum and instruction (3)
- ORLD 4040 The American college student (3)
- ORLD 4820 Cultural diversity training in higher education, (1)

One (1) course from the following:

- ORLD 4020 College and university organization and administration (3)
- ORLD 4051 How adults learn (3)
- ORLD 5525 College student development theories (3)

Not usable as a core requirement by students in the Academic and Developmental Analysis sequence.

Additional requirements for Academic and Developmental Analysis include a practicum (approximately 15-20 hours per week), a comprehensive project, and the following coursework:

- ORLD 5241 Observation and supervised fieldwork 1 (3)
- ORLD 5242 Observation and supervised fieldwork 2
 (3)
- ORLD 5525 College student development theories, Part I (3)
- ORLD 6550 Advanced seminar: college student development, Part 2 (3) (Master's comprehensive project in this course)
- 3 Electives, out-of-Program (two 3-point courses, and one 1-point course) (7)

Requirements for Organizational and Institutional Analysis include the following coursework as well as a comprehensive examination:

 ORLD 4031 Financial administration of higher education (3)

Three (3) courses from the following:

- ORLD 4012 The Community college (3)
- ORLD 5527 The professoriate (3)

- ORLD 6550 Advanced seminar: research administration (3)
- ORLD 5021 Patterns of organization and management (or equivalent) (3)
- ORLD 4051 How adults learn (3)
- ORLD 4500 Special topic: technology & higher education (3)
- A&HF 5070 History & theory of higher education (3)
- * 3 out-of-Program Electives (two 3-point courses, and one 1-point course) (7)

Requirements for Social and Comparative Analysis include the following coursework as well as a comprehensive examination:

- ORLD 5044 Theories of diversity in higher education (3) or ORLD 6551 Advanced seminar: comparative-international higher education
- ORLD 6551 Advanced seminar: higher education policy
 (3)

A&HF 5070 History & theory of higher education (3)

- ORLD 5011 College teaching and learning (3)

 or

 ORLD 5527 The preference:
 - ORLD 5527 The professoriate (3)
- ORLD 6551 Advanced seminar: intercultural communication: issues & practices (3)
 ORLD 4051 How adults

ORLD 4051 How adults learn (3)

3 out-of-Program electives (two 3-point courses, and one 1-point course) (7)

Master of Education

The Ed.M. requires a minimum of 60 points and an integrative paper prepared as a culminating project.

Core courses (required):

- ORL 5521 Introduction to research methods (3)
- ORLD 6551 Advanced seminar: coordinating seminar (3)
- ORLD 5526 Literature of higher education (3)
- ORLD 5525 College student development theories, Part 1 (3)
- ORLD 4011 Curriculum and instruction (3)
- ORLD 5527 The professoriate (3)
- ORLD 4020 Higher education organization and administration (3)

ORLD 5021 Patterns organization and management (or equivalent) (3)

- ORLD 4031 Financial administration of higher education institutions (3)
- ORLD 4010 Purposes and policies of higher education (3)
- ORLD 6551 Advanced seminar: higher education policy seminar (3)
- ORLD 6551 Advanced seminar: Comparative-international higher education (3)
- ORLD 6557/8 Research practices in higher and adult education (3)
 (Integrative paper is prepared in this course.)

Of the remaining 8 courses, 5 should be within the Program, with at least 3 concentrated in one of the curricular domains (Academic and Developmental Analysis, Institutional and Organizational Analysis, or Comparative and Social Analysis). The remaining 3 should be outside the Program, with at least 2 of these outside the Department. All extra-Program courses should relate conceptually, substantively, or methodologically to the student's developing area of interest.

Internship Option for the Ed.M. (based on space available): Although an internship is not required for this degree, stu-

dents may apply for one with faculty advisor approval. In such a case, students will distribute the 8 remaining courses as follows: 5 courses within the Program, two of which must be ORLD 5241 and ORLD 5242, and 3 of which must be concentrated in one of the curricular domains.

Distribution of extra-Program courses (3) are as above.

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 (3)
- A minimum of three additional research courses to be selected relative to student's research preparation needs.
 See Department requirements.
- ORLD 6551 Advanced seminar: coordinating seminar (3)
- ORLD 5526 Literature of higher education (3)
- ORLD 5525 College student development, Part 1 (3)
- ORLD 4011 Curriculum and instruction (3)
- ORLD 5527 The professoriate (3)
- ORLD 4020 Higher education organization and administration (3)
- ORLD 4031 Financial administration of higher education institutions (3)
- ORLD 5021 Patterns organization and management (or equivalent) (3)
- ORLD 4010 Purposes and policies of higher education (3)
- ORLD 6551 Advanced seminar: higher education policy seminar (3)
- ORLD 6551 Advanced seminar: comparative-international higher education (3)

Remaining 15 classes (45 points) are to be distributed as follows:

10 courses within the Program: Development of a concentration within one or two of the curricular domains, or crossing all three, with advisor approval; concentration must represent a coherent area of study that broadly situates dissertation research.

5 courses outside the Program, with at least 3 of these outside the Department. These courses must contribute substantively, theoretically, or methodologically to the student's selected area of study.

Internships may be open to doctoral students on a space available basis, but require approval of faculty advisor and program coordinator, including possible addition of course requirements.

Courses:

ORL 5521. Introduction to research methods in education

Professors Knefelkamp, Neumann, Richards, 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 read and critique education research and evaluation. Methods discussed will include both qualitative and quantitative approaches to research, such as surveys, case studies, ethnography, participant observations, interviews, and oral histories.

ORLD 4010. Purposes and policies of higher education (3) Professor Anderson. 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.

ORLD 4011. Curriculum and instruction in higher education

Professors Knefelkamp, Levine, and Neumann. An introduction to the history, trends, and issues pertaining to curriculum in U.S. higher education. Internal and external influences on curriculum decisions and implications for the organization and administration of colleges and universities. Examination of past and current curriculum trends, including the impact of the new scholarship of gender, race and class.

ORLD 4012. The community college (3)

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, students, state and local governance, teaching, student personnel work, finance, adult education, and the future of the community college.

ORLD 4020. College and university organization and administration (3)

Professor Anderson, Dr. Hankin, and Professor Petrides. 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.

ORLD 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.

ORLD 4030. The economics of post-secondary 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.

ORLD 4031. Financial administration of higher education institutions (3)

Professors Baldwin and Dougherty. The course is intended for those who will be involved in the budgeting process at colleges and universities. No previous financial training is required. The course is an introduction to business principles and their importance for decision making in higher education. Topics include budgeting, accounting, financial reporting, and planning.

ORLD 4040. The American college student (3)

Professors Dougherty and Knefelkamp. Reviews the demographic data about students, the changing relations of students to colleges, the diverse patterns of structure and function by which colleges individualize education and provide for student development, and the influence of colleges upon students.

ORLD 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.

ORLD 4042. Student personnel administration: programs and services (3)

Dr. Christensen. A survey of programs and services typical of American colleges and universities. Includes contemporary issues of concern to student personnel administrators.

ORLD 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.

ORLD 4051. How adults learn

Professor Knefelkamp and Dr. 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 4500. Special topics in higher and 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 (0-3)

Faculty. Special topics or events related to the administration of programs of higher or adult education. Topics change each semester. Open to degree and nondegree students for credit or Noncredit.

ORLD 4820. Cultural diversity training in higher education settings: Issues and concerns (1) Professor Knefelkamp. 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.

ORLD 4830. Transforming the curriculum: theory and practice (3)

Professor Knefelkamp. 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.

ORLD 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.

DEPARTMENT OF ORGANIZATION AND LEADERSHIP

ORLD 5011. College teaching and learning (3)

Professors Knefelkamp and 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.

ORLD 5021. Patterns of organization and management in higher education (3)

Professors Anderson and Petrides. Prerequisite: ORLD 4020 or an introductory course in higher education; a course in organization theory is strongly advised. The study of college and university organization from multiple perspectives, with emphasis given to understanding their implications for executive and management practice.

ORLD 5022. The issue of quality in postsecondary education (3)

Faculty. Examination of the issue of quality as it exists and is debated in higher education. Looks at the evolution and development of the issues of quality as they manifest themselves in accreditation, assessment, program review, and total quality management. Course investigation will begin at the macro (institutional) level and progress to the micro (classroom, student) level.

ORLD 5044. Theories of diversity and higher education (3) Professors Anderson and Knefelkamp. 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.

ORLD 5045. The Multicultural self in higher education (3) Professor Knefelkamp. Course focuses on issues of identity development, social and cultural diversity, and the intersections of multiple aspects of the self. Perspectives of social identity development, intellectual and ethical maturity,

social learning theory, and intercultural analysis are major components in the study of the individual.

ORLD 5241-ORLD 5242. Observation and supervised fieldwork in student personnel administration (3)

Dr. Christensen. Permission required. Prerequisites: ORLD 4041 and ORLD 4042. Students reserve two days a week for work in colleges. A weekly seminar integrates field practices with course theory.

ORLD 5522-ORLD 5528.

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 department. Other students in the college who wish to enroll should obtain permission of the instructor.

• ORLD 5522. The chief student affairs officer (2)

Faculty. Consideration given to the roles of such officers in colleges and universities, to their responsibilities and authority, and to their relations with presidents, faculties, students, and their own staff. Registration is restricted to doctoral candidates in the Higher and Adult Education programs and requires the permission of the instructor.

• ORLD 5524. An analysis of student cultures (3)

Professor Knefelkamp. 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.

• ORLD 5525. College student development theories I (3) Professor Knefelkamp. Course focuses on college student development theories and their appli-

cation 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.

• ORLD 5526. The literature

- ORLD 5526. The literature of higher education (2–3) Professor Neumann. Analysis of selected classic and contemporary works that have influenced professional thought and affected public opinion and public policy related to higher education. Topics vary from year to year.
- ORLD 5527. The college professoriate (3)
 Professors Knefelkamp and Neumann. Review and discussion of the research and literature, diverse roles, and expectations that characterize the position of college professor, with attention to implications for professional and personal development.
- ORLD 5528. Legal aspects of the role of the college teacher (2)

Faculty. Topics include legal aspects of faculty employment, academic freedom, faculty-student relations (academic and disciplinary), and liabilities.

ORLD 5531-ORLD 5537.

Advanced professional skills Intensive work in special skill areas for the management of post-secondary education. The sections involve practical experiences and possibly fieldwork. These courses are intended for practicing professionals in post-secondary education as well as for majors in the department. Other students who wish to enroll should obtain the permission of the instructor.

- ORLD 5531. Collective bargaining (2–3)
- Faculty. The theory and practice of faculty collective bargaining from institutional, organizational, and inter-group perspectives. Participants participate in bargaining exercises and engage in the simulated negotiation of a complete college contract.
- ORLD 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.

• ORLD 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.

- ORLD 5536. College classroom assessment (3) Professor Knefelkamp. An indepth 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.
- ORLD 5537. College classroom assessment research (3) Professor Knefelkamp. Prerequisite: ORLD 5536. In-depth study of classroom research methods based on the classroom assessment methods studied in ORLD 5536.

ORLD 6241. Advanced fieldwork in student personnel administration (2–6) Permission required. Open to parttime and full-time doctoral students. Forty hours of work required for each point of credit.

ORLD 6511. Coordinating seminar in higher education (3) Professors Anderson, Knefelkamp, and Neumann. Permission required. Course restricted to doctoral 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.

ORLD 6520-ORLD 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 systems for the community college are explored in depth. Topics vary each year.

ORLD 6550-ORLD 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.

ORLD 6552. Advanced seminar in theories of intellectual and ethical development for college students (3)

Professor Knefelkamp. 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.

ORLD 6556. Educational leadership: research, art and practice (3)

Professors Anderson and Knefelkamp. 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.

ORLD 7500. Dissertation seminar in higher and 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 instructorapproved *Learning Contract* prior to enrolling in any of the following courses.)

ORLD 4900. Research and independent study in higher and adult education (2 or more).

ORLD 5900. Research in higher and 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 6557-6558. Research practices in higher and adult education
Faculty.

ORLD 6900. Research and independent study in higher and adult education (2 or more) Permission required.

ORLD 7900. Directed dissertation proposal seminar (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 7500. Directed dissertation proposal seminar (1) Students register for the course the semester a proposal hearing is to be scheduled.

ORLD 8900. Dissertation advisement in higher and 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.

ORLD 9900. Research and independent study in higher and adult education (2 or more).

See also:

Department of Organization and Leadership:

ORLA 4010. Introduction to organization and change theory in education (3)

ORLA 5017. Organizations and interpersonal behavior (3) ORLJ 4055. Organizational Psychology (3)

Department of Human Development:

HUDK 4024. Developmental psychology: adulthood and the life span (2–3)

Department of Counseling and Clinical Psychology: CCPJ 4064. Principles and

methods of psychological counseling (3) CCPJ 5164. Cross-Cultural

Counseling (3) CCPJ 6052. Career Counseling

Department of Arts and Humanities: A&HF 5070. History and theory of higher education (3)

Department of Mathematics, Science, and Technology MSTU 4030. Computer applications in education (3)

Nurse Executive

Program Coordinator: Professor Elaine L. Rigolosi For Admission inquiries: 212-678-3710

Program Office: 212-678-3421

(Code: TNZ-M.A. Accelerated) (Code: TNX-Ed.D. Accelerated)

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

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 students in the executive programs.

The accelerated Master of Arts cohort begins every other Autumn 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 current Registered Nurse License in a state in the U.S. or in a province of Canada.
- 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.
- 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.

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 Autumn 2005 semester.

Program Description:

The Program for Nurse Executives 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 health care 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 Program for Nurse Executives 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 Program for Nurse Executives offers preparation for nursing and healthcare management positions in a variety of healthcare organizations, on the basic skills and concepts of management. Regular faculty members and other experts teach the courses that comprise the curriculum in the Accelerated Program for Nurse Executives. The Accelerated Program at the M.A. level is a cohort program that meets one day per week on Fridays. It runs for four semesters. Program costs currently are \$9,000 per semester of study and include tuition, fees, and refreshments. The flat rate fee covers cohort courses only. The cost of the program is subject to change.

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, whether the degree is the Master of Arts or the Master of Education. Details are provided in "Guidelines for the Capstone Project," which can be obtained from the office of the Program for Nurse Executives and from Faculty Advisors.

Master of Arts

Semester I

- ORL 4054 Leadership and management for healthcare organizations (3)
- ORLN 4005 Theories of nursing (3)
- ORLN 4050 Health problems and issues in society (3)
- ORLN 4013 Fiscal management of the nursing organization (3)

Semester II

- ORL 4011 Personnel management in healthcare (3)
- ORLN 5000 Nursing science
- HUDM 4120 Basic concepts in statistics (3)
- ORLN 5013 Informatics in nursing (3)

Semester III

- ORLN 5040 Methods of nursing research (3)
- ORLN 5010 Administration of a nursing organization (3)
- ORL 4003 Crisis intervention (3)

• ORL4014 Legal issues for healthcare professionals (3)

Semester IV

- ORLN4001 Contemporary issues in nursing (3)
- ORLN 6615 Colloquium in nursing administration (3)
- HUD 5021 Methods of empirical research (3)
- ORLN 5530 Seminar: clinical teaching and evaluation (3) *Courses and/or sequence are subject to change.

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 \$9,000 per semester of study and include tuition, fees, and refreshments. The flat rate fee covers cohort courses only. The cost of the program is subject to change without notice. For program course recommendations and program planning, please see the Doctor of Education "Advisement Guide" which can be obtained from the office of the Program for Nurse Executives. The following is an example of a doctoral cohort sequence by semester.*

Semester I

- HUDM 4122 Probability & statistical inference
- ORLN 5005 Interdisciplinary theory in nursing
- ORLN 6514 Marketing nursing programs & services

Semester II

- ORL 6500 Qualitative research
- ORL 5551 Ethics for healthcare professionals
- ORLN 6615 Colloquium in nursing administration

Semester III

- ORLN 5043 Nursing research development
- ORLN 6522 Health care policy & analysis
- A&HF 4084 Social philosophy & education

Certification

Semester IV

- ORLN 6540 Dissertation design development
- ORLN 6014 Managing the socially responsible organization
- ORLN 6011 Advanced system management

Semester V

- ORLN 6541 Advanced dissertation design development
- ORLN 5011 Designing, planning & monitoring healthcare systems
- ORLN 7500 Dissertation seminar in nursing

Semester VI

- ORLN 7900 Directed dissertation research
- ORLN 6511 Innovations in nursing management
- ORLN 6635 Colloquium in nursing education

*Courses and/or sequence are subject to change

NOTE: After course work is completed, candidates must enroll in ORLN 8900 (Continuous Dissertation Advisement), or in another Teachers College course upon the advice of the Advisor, up to and including the semester in which the "Defense" is held and major revisions are made on the document, as recommended by the Dissertation Committee.

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, communications theory, and evaluation performance. Special fee: \$20.

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: \$20.

ORL 5551. Ethics for healthcare professionals (3)

Review of ethical issues in healthcare and healthcare delivery.

Nursing Domain Fieldwork Courses

Application for fieldwork courses must be submitted by April 15 for the Autumn term and by November 15 for the Spring term. Students are required to follow program procedures. Applications are available in the program office.

General Courses within the Nursing Domain

Courses in this section deal with the theory of nursing in practice, nursing as a profession, and the history and contemporary trends in nursing. These courses are open to students in any nursing sequence of study; they also are open to interested students, nurses or nonnurses, from other departments.

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

ORLN 6600. Colloquium in nursing theory (3)

analysis and theory derivation.

Faculty. Prerequisites: 2 courses in nursing theory. Examination of a selected nursing theory or theory problem in depth. Course may be repeated for credit if different topics are covered.

ORLN 6909. Independent study in nursing theory (1–6) Faculty. Permission required. Individual, guided learning experience in a selected nursing theory or theory problem. Topic agreed upon between student and faculty.

Professional Nursing

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: 2 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 5340. Practicum in archives and historical research

Faculty. Prerequisites: ORLN 5040 and ORLN 5043. An introduction to the theory and practice of archives administration and histor-

ical research. Course treats the fundamentals of these two interrelated fields through lectures, readings, practical exercises, and a project involving: (1) arrangement and description of a manuscripts collection or (2) an oral history interview. Projects focus on the Nursing Archives in the Teachers College Milbank Memorial Library.

ORLN 5540. Seminar in master's thesis development (3) Faculty. Permission required. Group critique of thesis proposals; analysis of theory and research design. Open only to students writing theses. This course may be repeated as often as necessary until the student is ready to present the thesis proposal for faculty approval in ORLN 5541. Continuous Autumn/Spring enrollment is required until the semester in which presentation is held.

ORLN 5541. Master's thesis seminar in nursing (3) Faculty. Permission required. Prerequisite: ORLN 5540. Involves presentation of Master's thesis proposal for faculty approval.

ORLN 5940. Master's advisement in nursing (3)

Faculty. Permission required. Individual advisement on master's thesis. May be repeated for up to 6 points. Involves active work toward completion of a thesis proposal that has been accepted by faculty.

ORLN 6540. Dissertation design development (3)

Professor Rigolosi. Permission required. Prerequisites: ORLN 5043, ORLN 4005, ORLN 5005, 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 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 7500. Dissertation seminar in nursing (3)

Faculty. Permission required. Prerequisite: ORLN 6540 and certification. The departmental examination, involving presentation of dissertation proposal for faculty approval. This course is required of all certified doctoral candidates and may be taken only once.

ORLN7900. 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.

ORLN 8900. Dissertation advisement in nursing (0) Individual advisement on docto

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.

ORLN 6940. Independent study in nursing research (1–6) Permission required. Allows student to contract with an individual faculty member for research related work in a defined area of study.

Role Preparation

The rest of the nursing courses focus on combining cognate and nursing knowledge in synthesizing knowledge needed in role fulfillment.

General Courses in Role Preparation

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 5530. Seminar: clinical teaching and evaluation (3) Faculty. Inquiry in effective strategies for teaching and evalu-

ating students in the laboratory setting. Analysis of theory ad related research.

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 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 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 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.

Nursing Organization Executive Role

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 nursing care system (3)

Faculty. Prerequisite: ORL 4054. Corequisites or prerequisites: ORLN 5010, ORLN 4013, and ORLN 4005. 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 5212. Fieldwork in executive nursing management (3–6)

Faculty. Permission required. Prerequisites: ORL4054, ORL 4011, ORLN 4012, ORLN 4013, ORLN 5010, ORLN 5011. Open only to 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 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 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.

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 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 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.

Nursing Education Executive Role

ORLN 6521. Legal aspects of nursing education (3) Faculty. Legal responsibilities of faculty and administration in an educational setting.

ORLN 6625. Colloquium in nursing education organization

Faculty. Permission required. Prerequisite: determined by instructor based on topic covered. Examination of selected problems in nursing educational organization in depth. Course may be repeated for credit if different topic covered.

ORLN 6920. Independent study in nursing education organization (1–6)

Permission required. Individualized, guided learning experience in

a selected aspect of nursing educational administration. Topic agreed upon between student and faculty.

Politics and Education

Program Coordinator:
Professor Jeffrey Henig
E-Mail:
henig@exchange.tc.columbia.
edu
For Admissions Inquiries:
(212) 678-3258 (Program
Office)
(212) 678-3710 (Admissions
Office)
Web Site:
bttp:www.tc.columbia.edu/academic/o&ldept

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

Special Application Requirements/Information:

All applicants are required to submit GRE General test scores. Doctoral applicants must submit two *academic* letters of reference. Ph.D. applications are due December 15. Ed.D. applications are due January 2. Master's applications for spring admission are due November 1. Master's applications for the summer or fall terms are due either by the priority deadline of January 15, or by the final master's deadline, April 15.

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 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 (non-certified) 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 thinktanks 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.

Degree Requirements:

Currently, the Politics and Education program is undergoing a comprehensive reorganization of its offerings. Applicants are encouraged to consult the TC website at www.tc.columbia.edu/academic/o&ldept for specific courses and program expectations. General degree requirements are listed below.

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 approve of an assigned faculty advisor after the student is admitted. 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:

Introductory

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 policymaking, 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 desegration, 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 6903. Research and independent study (1–3) Faculty/Staff. Permission required.

ORLF 6940. Studies in politics and education (1–15)

ORLF 7503. Dissertation seminar (0–3)

Permission required. Required of doctoral students in the semester following successful completion of certification examinations.

ORLF 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 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-Organizational Psychology

Program Coordinator: Professor Warner Burke For Admissions Inquiries: 212-678-3710

Program Office: 212-678-3249

Psychology: Organizational

Degree Offered: Master of Arts (M.A.) (Code: TJA)

Social-Organizational Psychology

Degrees Offered:
Doctor of Education (Ed.D.)
(Code: TJG)
Doctor of Philosophy (Ph.D.)
(Code: TJP)

Special Application Requirements/Information:

Master of Arts

The M.A. program in Organizational Psychology 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.

Doctor of Education and 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. The GRE and a writing sample are required. It is recommended, but not required, that applicants also take the GRE Advanced Examination in psychology. Full-time study is required for the first and second years. Applicants are required to submit a copy of a recently completed paper on a topic of interest to them. This may be, but does not have to be, a paper submitted to satisfy course requirements.

Admission to the doctoral program is highly competitive. Preference is given to candidates who possess excellent verbal and quantitative skills and whose transcripts, references, admissions interview, and previous work experience suggest that they have the potential to make a significant contribution to theory and practice, policymaking, or research.

Program Description:

The Social-Organizational Psychology program is concerned with the various contexts (interpersonal, group, intergroup, and interorganizational) 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 and 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 pro-

grams 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. An Ed.D. is also available under certain circumstances. A terminal M.A. degree in Psychology: Organizational is awarded upon successful completion of 45 points and passing the comprehensive examination. Doctoral candidates in Social-Organizational Psychology may apply for award of the M.A. en passant upon successful completion of a minimum of 45 points and one of the three qualifying papers required for the doctorate. The Ph.D. degree is awarded upon completion of 84 points of planned and sequential study and a dissertation; and the Ed.D., upon completion of 90 points and a dissertation.

A Certificate of Attendance in Conflict Resolution is also offered to students in the Master/Doctorate programs who select Conflict Resolution as their area of concentration. Students interested in receiving the Certificate must complete a sequence of 5 courses and 1 semester of internship. Students who opt for this concentration must formally apply to the International Center for Cooperation & Conflict Resolution (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 the Columbia University, particularly the Graduate School of Business. The program awards one general degree entitled "Psychology: Organizational," regardless of what specific classes are taken. 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 development, organizational 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 the positions typically found within the personnel or human resource function of middle or large-size organizations. Some specific examples include: training, career development and counseling, personnel research, organization development and consultation, employee relations, and human resource planning.

Students in the M.A. program who wish to extend their range of competencies to include individual and group counseling skills may, upon completion of the M.A., apply for admission to the Ed.M. program in Psychological Counseling (see "Counseling Psychology"). Further information may be found in bulletins obtainable from the coordinator of the Counseling Psychology programs at (212) 678-3397 (428 Horace Mann).

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 Education and Doctor of Philosophy

The program is based on the assumption that systematic inquiry constitutes the core of the educational process. Supervised and independent research is a major component of the student's work throughout the program. The student's study ordinarily begins with emphasis on fundamental concepts and research methods, proceeds to more specialized courses and independent research, and concludes with a major inquiry resulting in a doctoral dissertation. The dissertation is viewed not as the end product of a student's work in the program, but merely as another piece of research in a series that begins early in the student's career and is continued after he or she has earned the doctorate.

Degree Requirements: Note the basic research requirements for all students in the Department.

Master of Arts

The program curriculum is comprised of major courses consisting of five required core courses, four required advanced core courses, other elective ORLJ courses, and 3 non-ORLJ courses taken for at least 2 points each in related fields. These courses must be taken within Teachers College (see Teachers College Catalog, "General Requirements for the M.A. Degree").

Courses available at the Graduate School of Business, Engineering and Applied Sciences, Social Work, and in other areas of the Columbia University Graduate programs may be taken. These related courses count toward the elective course

work within organizational psychology, not toward the 3 non-ORLJ courses that must be taken within Teachers College. Students should consult with an advisor to select courses to satisfy the latter requirement. An effort is made to assist students in developing a program of study that will best meet their personal career interests and objectives. Certain required courses may be waived or substituted with others depending on the person's undergraduate background, graduate study and work experience.

Within the program, persons may elect to concentrate in any one of three areas:

- human resource development
- organizational change and consultation
- 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 five courses are required for all candidates, unless waived by the program adviser 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)
- ORLJ 5106 Psychological aspects of organizations (3)

Advanced Core Required Courses: Level 2

- ORL 5362 Group dynamics (3)
- ORLJ 5014 Organizational dynamics (3)

 ORLJ 6040 Fundamentals of cooperation, conflict resolution and mediation in different institutional contexts (3)

Plus one of the following applications courses:

- ORLJ 5012 Internship in organizational psychology (3)
- ORLJ 5340 Basic practicum in conflict resolution and mediation skills (3)
- ORLJ 6343 Practicum in change and consultation in organizations (3)

Organizational Psychology: Human Resource Development: Four recommended courses for this area of concentration:

- ORLJ 5169 Assessing and facilitating career development (2–3)
- ORLJ 5106 Psychological aspects of organizations (3)
- ORLD 5055 Staff development and training (3)
- CCPJ 5062 Career counseling and development (2–3)

Organizational Psychology: Organizational Change and Consultation:

Five recommended courses for this area of concentration:

- ORLJ 5014 Organizational dynamics and theory (3)
- ORLJ 5020 Preparation for coaching (3)
- ORLJ 5106 Psychological aspects of organizations (3)
- ORLJ 6343 Practicum in change and consultation in organizations (4)
- ORLJ 5005 Leadership (3)

Organizational Psychology: Conflict Resolution (Note: Students interested in receiving a Certificate of Attendance in Conflict Resolution must complete a sequence of 5 courses and 1 semester of internship.)

DEPARTMENT OF ORGANIZATION AND LEADERSHIP

Four recommended courses for this area of concentration:

- ORLJ 5340 Basic practicum in conflict resolution and mediation skills (3)
- ORLJ 6040 Fundamentals of cooperation, conflict resolution and mediation in different institutional contexts (3)
- ORLJ 6350 Advanced practicum in conflict resolution and mediation, section I (3)
- ORLJ 6350 Advanced practicum in conflict resolution and mediation, section II: designing conflict management systems (3)

Suggested Organizational
Psychology Electives:
The following courses are suggested electives within ORLJ.
Students may choose from among these electives and other relevant electives that are not listed here.

- ORLJ 5005 Leadership and supervision (3)
- ORLJ 5012 Organizational internship (2–3)
- ORLJ 5013 Negotiations in organizations (3)
- ORLJ 5015 Executive selection and development (3)
- ORLJ 5016 Special topics in organizational psychology: advanced functions in organizations (3)
- ORLJ 5016 Special topics in organizational psychology: motivation and reward systems (3)
- ORLJ 5018 Using survey research in organizations (2–3)
- ORLJ 5019 Multi-rater feedback (2–3)

Suggested Outside Psychology Organizational Electives: Please consult with an academic advisor.

 ORL 5000 Methods of inquiry: ethnography and participant observation (3)

- ORL 6500 Qualitative research methods: design and data collection
- ORL 6501 Qualitative research methods: data analysis & reporting
- C&T 4335 Models of teaching: practicum (1)
- CCPJ 4064 Principles and methods of psychological counseling (3)
- CCPJ 4065 Career development of women (2–3)
- CCPJ 5020 Racism and racial identity in psychology and education (3)
- CCPJ 5062 Career counseling and development (2–3)
- CCPJ 5361 Preparation for individual counseling and interviewing (3)
- CCPX 4030 Psychology of adjustment (3)
- CCPX 5034 Developmental psychopathology (3)
- HBSS 4120 Topics health education: stress (2–3)
- HBSS 4120 Topics health education: health and business (2–3)
- HBSS 4140 Developing workplace health promotion programs (3)
- HUDF 5020 Methods of social research: survey methods (3)
- HUDK 5034 Research methods for cognition and learning (3)
- HUDK 5198 Psychology of instructional systems designs (3)
- HUDM 4050 Introduction to measurement (2–3)
- HUDM 4122 Probability and statistical inferences (3)
- HUD 5021 Methods of empirical research (3)
- HUDM 5055 Evaluations of institutions: programs and curricula (3)
- HUDM 5056 Evaluations of institutions: programs and curricula, 2 (3)
- HUDM 5058 Choice and decision making (3)
- HUDM 5059 Psychological measurement (3)
- MSTU 4010 The nature of communication (2–3)

- MSTU 4031 Programming I (4)
- MSTU 4052 Computers, problem solving and cooperative learning (Parts I & II) (3)
- MSTU 4083 Instructional design of educational technology (3)
- MSTU 4085 New technologies for learning (2–3)
- MSTU 5510 Topic Seminar: technology, education, and social policy (3)
- ORLA 4011 Behavior in organizations (3)
- ORLA 4046 School finance: policy/practice (3)
- ORLA 5017 Groups and interpersonal behaviors (2–6)
- ORLA 5018 Understanding authority and exercising leadership (3)
- ORLA 5530 Action research in organizational behavior (3)
- ORLD 4051 How adults learn (3)
- ORLD 4052 Program development: assessing learning needs and evaluating outcomes (3)
- ORLD 4053 Facilitating adult learning (3)
- ORLD 5055 Staff development and training (Parts I & II) (3)
- ORLD 5056 Adult education: social action (3)
- ORLD 5057 Adult learning and education: theory and practice (3)
- ORLD 5061 Advanced staff development and training (3)
- ITSF 4012 Cross-cultural studies of learning (3-4)

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
A comprehensive examination
is taken after all the core
courses have been satisfactorily
completed and 30 points of
graduate study have been completed, or later at the discretion
of the candidate and the faculty
advisor. The exam covers all of
the major topic areas in organizational psychology.

Doctor of Philosophy

Students are required to take as many as 84 course-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, however, since courses transferred must be equivalent to courses that are required in the Ph.D. program.)

During their graduate careers, students are expected to participate in introductory and advanced seminars in psychology, social psychology, organizational psychology, and statistics. In addition, according to their individual interests, students may take courses in any of the schools and graduate facilities of Columbia University.

Research Training

A substantial portion of the training in this program is based on the assumption that most of an organizational psychologist's professional skills are best learned by doing. Hence, from the first year onward, all students routinely participate in the design, execution, data analysis, and writing phases of both laboratory and field research. These experiences are obtained as students join with other students and faculty to work on particular research projects. (Current research interests are represented in the above listing of seminars.) However, in many of the programs' courses, students are expected to conduct small-scale inquiries.

This commitment to research training is a particularly important part of the program and consumes a major portion of a student's time.

Applied Aspects of the Program Although most of the research being conducted in the Social-Organizational Psychology laboratories is concerned with basic theoretical issues in social and organizational psychology, there is considerable emphasis placed on short-term, applied research designed to give answers to immediate social concerns. School boards, hospitals, welfare agencies, housing agencies, universities, community mental health centers, and other non-profit organizations are as much in need of descriptive and diagnostic studies as are industrial and business firms. Students in social-organizational psychology are trained to do various kinds of applied research and consultation with a variety of organizations.

To meet the increasing demand for psychologists to function as consultants to social systems, students are provided with other applied opportunities to acquire skills in human relations training and organizational consulting. In addition to seminars and practice, the Social-Organizational Psychology Program makes available a variety of supervised field experiences for students to develop these skills.

The course requirements are divided into five major sections: Research and Statistics (7 courses), Theory in Social-Organizational Psychology (6 courses), Practice in Social-Organizational Psychology (4 courses), Integrative Experiences (8 courses), and General Psychology Course Requirements (3 courses). Students should use the following paradigm in consultation with their doctoral advisors:

Research and Statistics (7 courses required)

- ORLJ 5040 Research methods in social organizational psychology I (3)
- ORLJ 5041 Research methods in social organizational psychology II (3)
- HUDM 4122 Probability and statistical inference (3) required, if necessary.
- HUDM 5122 Applied regression analysis (3)
- HUDM 5123 Linear models and experimental design (3)
- HUDM 6122 Multivariate analysis I (3)

Remaining courses to select from include:

- HUDM 6123 Multivariate analysis II (3)
- HUDM 6030 Multilevel and longitudinal data analyses (3)
- ORL 5000 Ethnography and participant observation (3)

Theory in Social-Organizational Psychology (6 courses required)

- ORLJ 5540 Proseminar in social psychology (3)
- ORLJ 5541 Proseminar in organizational psychology (3)
- ORLJ 5014 Organizational dynamics and theory (3)
- ORLJ 6040 Fundamental on cooperation and conflict resolution (3)

Remaining courses to select from include:

- ORLJ 5005 Leadership and supervision (3)
- ORLJ 5017 Small group intervention (3)
- ORLJ 5106 Levels of analysis in organizational issues (3)
- ORLJ 6045 Organizational demography (3)
- ITSF 5013 Psychological anthropology (3)

Practice in Social-Organizational Psychology (4 courses required)

- ORL 5362 Group dynamics (3)
- ORLJ 4002 Functions of Organizations

• ORLJ 6343 Practicum in change and consultation in organizations (3)

Remaining courses to select from include:

- ORLJ 5340 Practicum in conflict resolution (3)
- ORLJ 6350 Advanced practicum in conflict resolution (3)
- ORLJ 6244 Fieldwork in organizational consulting (3)
- ORLJ 5020 Preparation for coaching (3)
- ORLJ 5018 Multi-rater feedback (3)
- ORLJ 5019 Data-based interventions for organizational change (3)
- HUDK 5198 Psychology of instructional systems design
- ORLD 5055 Staff development and training (3)
- ORLD 5061 Advanced staff development and training (3)

Integrative Experiences (8 courses required)

- ORLJ 6342-6352 Workgroups (3)
- ORLJ 6349 Process consultation (3)
- ORLJ 6640 Colloquium in social-organizational psychology (0)

General Psychology Course Requirements (3 courses required) (consult an academic advisor for requirements)

- CCPJ 5020 Racial identity theory
- G 4003 Personality
- Walter Mischel's Personality Course
- Adult learning theory
- Test construction

Certification Examination in Social-Organizational Psychology Students must pass an examination administered by the Office of Doctoral Studies in social-organizational psychology. The student writes on a topic submitted by his or her advisor to the Doctoral Studies Office.

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, students may receive a Certificate of Attendance in Conflict Resolution. The courses are offered in conjunction with the ICCCR whose mission is to help individuals, schools, communities, businesses and governments better understand the nature of conflict and how to achieve its constructive resolution. Contact: Professor Peter Coleman (212) 678-3402.

Courses:

Courses at the 4000-level do not require permission of the instructor and are open to non-majors as well as majors. Many 5000-level offerings are also open to nonmajors 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

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)

Professors Block and Ostroff. Introduction to theories and research that underlie the field of organizational psychology. Implications and applications in various organizational contexts are considered.

ORLJ 4009. Understanding behavioral research (3) Professor Perry. 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 (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, 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 5012. Organizational internship (2–3) Faculty.

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 5014. Organizational dynamics and theory (3) Professors Burke. 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 5016. Advanced functions of organizations (2–3) Faculty. An advanced survey of the primary functions and operations of organizations, and the relation of these functions to human resource management.

ORLJ 5016. Motivation and reward systems (2–3)

Faculty. This seminar course provides an overview of the role of motivation and organization development in the design and implementation of strategic pay systems. Issues of organizational change, job analysis, job descriptions, salary surveys, job evaluation, work motivation, job attitudes, organizational citizenship behavior, executive compensation, incentive compensation, team-based pay, and expatriate compensation.

ORLJ 5020. 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 5017. Small group intervention: Theory and method (3) Professor Noumair. 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. Prerequisite: ORLJ 4009. This course illustrates how to conduct survey research for organizational change initiatives. The following topics are covered: entering into survey research consulting, selecting concepts, conducting focus groups, survey construction and administration, data analysis, identifying needs, survey feedback techniques, and final reports. Students develop a survey-based project from initial conceptualization to final report presentation.

ORLJ 5019. Multirater feedback

Drs. Church and Waclawski. Permission required. This course focuses on the theory, research, and application of three primary datadriven interventions for I/O psychology and OD-related interventions and initiatives: large scale assessment surveys; multi-rater (a.k.a. 360 degree) feedback methods; and interviews and focus groups. Course format combines lecture, case study, and group project work.

ORLJ 5040-ORLJ 5041. Research methods in social psychology (3)

Professor Block (Fall) and Professor Westaby (Spring). 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 5106. Psychological aspects of organizations (2–3) Faculty. 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) Dr. Sandy. 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 problemsolving skills. Strategies for classroom management and parent involvement are highlighted.

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.

ORL 5362. Group dynamics: A systems perspective (3–4) Professor Noumair and Dr. Brazaitis. Permission required. Prerequisite: ORLJ 4005. Enrollment limited. In addition to the regular course meeting times, there are two additional special weekend workshops, times/dates arranged each semester. 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 as members of an experiential group designed to provide opportunities for learning about group dynamics through an examination of power, authority, leadership, intergroup and interpersonal processes. Special fee: \$120.

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 will examine various theoretical frameworks that help us to understand how demographic variables influence organizational behavior and decisions.

ORLJ 6244. Fieldwork in organization consulting (3)
Professors Burke and Noumair.
Permission required. Prerequisite:
ORLJ 6343. Background in organization development required.
Students engage in consultation with a client that emphasizes data gathering, organization diagnosis and feedback.

ORLJ 6343. Practicum in change and consultation in organizations (4)

Professor Noumair. Permission required. Prerequisites: ORL 5362 or CCPJ 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 6344-ORLJ 6349. Research practicum in socialorganizational psychology Permission required. Limited to doctoral students. Topics are announced in the preliminary and final course schedules distributed each semester.

- ORLJ 6342. Multi-level research in organizations (2–3) Professor Ostroff.
- ORLJ 6344. Conflict, justice, and cooperation (2–3) Professor Coleman.
- ORLJ 6345. Diversity and discrimination in organizations (2–3) Professor Perry.
- ORLJ 6346. Organizational attitudes, job search, and career development (2–3) Professor Westaby.
- ORLJ 6347. Motivational issues in organizations (2–3) Professor Block.
- ORLJ 6348. Psychology of managerial and leadership competence and multirater feedback (2–3) Professor Burke.
- ORLJ 6349. Group/organizational dynamics and diversity issues in organizations (2–3)

Professor Noumair.

ORLJ 6350. Section I: 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 6350. Section II:
Advanced practicum in conflict resolution: Designing conflict management systems (3)
ICCCR Staff. Prerequisite: ORLJ 5340 and ORLJ 6040 or ORLJ 6350 Section 1. Limited enrollment. This workshop presents a practical approach that uniquely integrates organizational development, alternative dispute resolution, and dispute systems design principles into a working model to help assess conflict and evaluate processes within organizations.

ORLJ 6542. Directed research in social-organizational psychology (1–6)

Faculty. Permission required.

ORLJ 6640. Social-organizational psychology colloquium

Faculty. Permission required. For doctoral candidates only. Discussion of ongoing projects involving research and consultation.

ORLJ 7501. Dissertation semi-

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. Doctoral students should register for IND 6000 prior to the "Dissertation Seminar."

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 each course)
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.

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 for 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 five courses and one semester of internship.

The sequence of courses leading to the Certificate of Attendance in Conflict Resolution is:

- ORLJ 5340: Basic Practicum in Conflict Resolution and Mediation
- ORLJ 5340, 004: Conflict Resolution: Issues in Power, Rank, and Privilege (elective) /or any course offered by the ICCCR
- ORLJ 6040: Fundamentals of Cooperation, Conflict Resolution, and Mediation in Different Institutional Contexts
- ORLJ 6350, 001: Advanced Practicum in Conflict Resolution, Section I
- ORLJ 6350, 002: Advanced Practicum in Conflict Resolution, Section II—Designing Conflict Management Systems

For the internships, there are currently 4 possibilities (ORLJ 5012):

- Community Mediation
- Early Childhood Conflict Resolution
- School-based Conflict Resolution Training
- Conflict Resolution in Higher Education

For course descriptions, see the programs in Social-Organizational Psychology. ORLJ 5012: Organizational Internship ORLJ 5013: Negotiating in Organizations ORLJ 5340: Basic Practicum in Conflict Resolution and Mediation ORLJ 6019: Labor Management in Education ORLJ 6040: Fundamentals of Cooperation, Conflict Resolution, and Mediation in Different Institutional Contexts ORLJ 6350, 001: Advanced Practicum in Conflict Resolution, Section I ORLJ 6350, 002: Advanced Practicum in Conflict Resolution, Section II—Designing Conflict Management Systems ORLJ 5147: Conflict Resolution in Early Childhood Settings ORLJ 5340, 004: Issues in Power, Rank, and Privilege

For more information regarding the Certificate of Attendance, please contact the ICCCR Office at (212) 678-3402 or (212) 678-3289. Visit the web-site is: www.tc.columbia.edu/icccr

Education Policy

The breadth and depth of education policy studies at Teachers College is unmatched at any other school of education in the United States. TC 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 TC are grounded in a full range of disciplinary and interdisciplinary perspectives. We prepare students in quantitative, qualitative, and mixed-methods approaches. In addition to our emphasis on research and teaching, TC policy faculty work closely with legislators, governors, and other policy makers and provide opportunities for students to participate in this important work.

Policy courses are offered throughout the college, and students in all programs are encouraged to take advantage of this vast array of offerings Furthermore, TC policy faculty collaborate across the college to provide students with the widest possible range of learning experiences, including fieldwork and internships.

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. Please consult the TC website for more information about the policy and methods courses taught in each department.

For those students who wish to enter a specified concentration of courses organized around particular areas of study, Teachers College offers several different, but overlapping, policy concentrations in conjunction with master's and doctoral degree programs in Early Childhood Education, Economics and Education, Education Leadership, 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.

Graduates from our masters' programs with policy concentrations 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 doctoral programs with policy concentrations 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.

Below are brief descriptions of the currently organized policy concentrations. More detailed information on each is available in this catalog under descriptions of programs and their degree requirements and at the TC website. Join us and find out why Teachers College is the place to begin or strengthen your career in education policy.

Early Childhood and Policy Program in Early Childhood Education

Department of Curriculum and Teaching Offered at the M.Ed. and Ed.D. levels, the Early Childhood Policy Concentration is designed for those interested in shaping the policy agenda for young children and their families. Both the M.Ed. and Ed.D. programs combine opportunities to advance theoretical and practical knowledge of early childhood pedagogy and systems, understand and apply various research methodologies, and engage in applied policy work. Faculty Advisors: Sharon Lynn Kagan

Economics and Policy

Program in Economics and Education

Department of International and Transcultural Studies The Economics and Policy Concentration 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.

Leadership, Policy and Politics Education Leadership Program

Faculty Contact: Thomas Bailey

Department of Organization and Leadership

This Concentration develops student's skills in the political, economic and legal analysis of education policy issues with a focus on the role of leadership. Substantive courses are casebased. Students also complete a research methods sequence, conduct policy fieldwork and experience writing policy briefs for a variety of audiences. Students are encouraged to concentrate on one k-12 policy area of their own choosing. Faculty Contact: Craig Richards or Dorothy Shipps

Policy Studies in Sociology Sociology and Education Program

Department of Human Development
This Concentration allows students to use a sociological lens
to examine complex and contested policy issues such as
standards and testing, school
choice policy, racial and social
class segregation and stratification, and the digital divide.
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

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 the community schools, daycare centers, healthcare and social service agencies, the media, libraries and museums, and religious institutions. Values, attitudes, norms, selfconcepts, 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. Moreover, 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. An understanding of families is significant for educational policy, practice, and research. Efforts to improve education often entail attempts to change families or their connections with other institutions. 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, television, and other types of communication and computer-based 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 Center for Infants and Parents (Dr. Susan Recchia, Director), the Center for Young Children and Families (Professor Jeanne Brooks-Gunn, Director), and several departments within the college offer opportunities for study and research related to families. Additional opportunities for the interdisciplinary study of families and communities as educators are under development.

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 Victoria J. Marsick
Professor Celia Genishi
Professor Jo Anne Kleifgen
Professor Barbara C. Wallace

Law and Educational Institutions

Advisor: Professor Jay P. Heubert

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.

A concentration in education law can be developed in connection with degree programs in most departments. Opportunities in education and law are not limited to the courses below.

ORLA 4086 and ORLA 5016 are intended to cover basic legal background for effective performance in public or private K–12 schools.

ORLA 4086. Law and educational institutions: Issues of authority, religion, free speech, and safety (3)

Professor Heubert. For public and private schools: compulsory education, public regulation of private schools, public funding for private schools; free-speech rights of students, teachers, and non-schoolsponsored groups; control of the curriculum; issues of safety and

order (the schools' authority to make and enforce rules governing student and staff conduct); the schools' obligation to protect the safety of students and staff, child abuse, search and seizure, drug testing, and due process. This course and ORLA 5016 form a two-semester sequence. Enrollment is for one or both (in either order, but not concurrent.)

ORLA 5087. Law and educational institutions: college operation; private school operation (2–3)

Faculty. Legal framework; powers, duties, procedures of governing boards and administrators; acquisition and use of money and property; contracts with students, employees, suppliers; staff rights (employment, working conditions, separation, collective negotiations).

ORLA 5016. Law and educational institutions: equity issues (3)

Professor Heubert. This course focuses on issues of equal educational opportunity. Topics include desegregation; bilingual education and other services for English-language learners; 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.

ORLD 6551. Higher education and the law (3)

Professor Heubert and Mr. Sun. This seminar focuses on public regulation of post-secondary education (student records, sunshine laws, and state action); free speech rights of faculty and students; issues of contract law; gender equity; disability issues; employment discrimination and harassment; and affirmative action.

ORLA 5880 School Law Institute (2–3)

Professor Heubert and guest faculty. This intensive, one-week course focuses on a variety of school-law issues: special education, safety and order, child abuse, search and seizure, high-stakes testing, harassment, HIV/AIDS, affirmative action, and issues of race and immigration in education. The course is offered through the Center for Educational Outreach and Innovation. All inquiries should be referred to that office.

For information about programs coordinated with the School of Law, contact Professor Heubert. Programs are available for students admitted to either Teachers College or the School of Law.

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 or to, Director of the Institute for Urban and Minority Education, Box 75, Teachers College; (212) 678-3780.

IND 4033. Problems and programs in urban education (2–3) Knowledge, insights, and understandings emerging from theory, research, and practice, concerning urban education.

Interdisciplinary Studies in Education

(Code: TZT)

Program Coordinator: William J. Baldwin, Associate Dean

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.

Admission to the 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 two or three advisors from the relevant disciplines prior to admission. 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. Master's candidate (0)

This course is open to all degree students in master's 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.

In Step Programs

Special Application
Requirements/Information:

Refer to the individual degree program listings elsewhere in this catalog. When completing the Application for Admission, be sure to check off the In Step box. Otherwise, applicants will be considered for the traditional format degree programs. The In Step application deadline is April 15. Admission is for the summer term and only for the Master of Arts programs listed below. Not all programs may admit for a given summer. Please check with the Office of Admission or the In Step web site listed below to confirm that a particular In Step program is accepting applications.

Program Description:

The IN STEP program (In-Service Teacher Education Program) is a cohort experience designed for in-service teachers who are interested in obtaining a master's degree in 2 or 3 summers, with minimal coursework onsite or via distance learning during the academic year. We recognize that teachers need to devote their attention to curriculum planning and teaching. The IN STEP program enables beginning teachers to earn their master's degree without interrupting their careers.

Professionals who are currently teaching in a public or private school, or are a provisionally certified teacher, and are looking for a convenient and exciting way to obtain a master's degree should consider one of the following innovative summer programs at Teachers College:

- Art and Art Education
- Computing and Education
- Music and Education
- Teaching of English
- Teaching of Social Studies
- Science Education

These graduate programs will provide teachers with the analytical and critical skills required to integrate theory and practice, a hallmark of a Teachers College degree. In Step students will study with our internationally renowned faculty and obtain the professional credentials needed for success in today's job market.

Partial tuition scholarships will be offered on the basis of academic merit and financial need. In order to be considered, applicants must file a Free Application for Federal Student Aid (FAFSA) immediately. For expeditious processing, we encourage applicants to file their FAFSAs on-line at www.fafsa.ed.gov.

Applicants may request a FAFSA from the Office of Student Aid by calling (212) 678-3714 as well. Be sure to include the Teachers College federal code number: G03979.

To learn more about each of these programs, please visit us at http://www.tc.edu/summer@tc/instep.



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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 or two different degree programs or areas of specializations at Teachers College.

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 for multiple degrees. This information may be found in Appendix A of the doctoral requirements bulletins, on the bulletin board outside the Office of the Registrar, and in departmental brochures.

Period of Candidacy

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. If a student is readmitted to a degree program with a period of candidacy beginning after the expiration of the initial five-year period of candidacy, the departmental integrative requirement, and at least 16 points must be completed through Teachers College during the final five-year period prior to the award of the degree so as to meet recency requirements. Candidates may petition the Registrar for an extension of time for adequate reasons; the petition is acted upon by a faculty committee. In such cases, an extension must be recommended by the major advisor, current requirements met, including the departmental integrative requirement, and at least 16 points completed through Teachers College during the final five-year period prior to the award of the degree. Petitions for extension may be obtained from the Office of the Registrar.

Academic Performance

The faculty of the College requires that all students maintain an acceptable grade average. Some departments specify an overall minimum grade average (see specific departmental statements). Any department judging a student to be performing below expectation 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. Any student receiving eight or more points in grades of C- or lower is not permitted to continue registration in the College in any capacity and may not receive a degree or diploma. Petitions for exceptions 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 are then submitted to a faculty committee for review and decision.

Application for Degree or Certificate Award

Candidates for the award of a degree or 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 applica-

tion. If the degree or certificate is not then earned, a Renewalof-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, including three graduate Teachers College courses outside the major department.

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 two 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.

Essar

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 Teach-

ers 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 Teachers College major department. (In this case, a course is defined as one in which at least two 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 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. Students who were fully admitted before September 1, 1982 should consult with the Office of Doctoral Studies. 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 pro-

gram of 90 points of 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 TC doctoral students who have not registered in the last five years must apply for readmission through the Office of Admission. If readmitted, 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 three points of Teachers College course credit, or for the dissertation advisement course, in each Autumn 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 Autumn 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.

The degree of Doctor of Philos-

Doctor of Philosophy

ophy 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 points beyond the Baccalaureate; submission of a statement of total program indicating periods of intensive study subsequent to the first year of graduate study which accompanies the program plan of study; satisfactory performance on foreign language examinations and on a departmental Certification Examination; and preparation and defense of a research dissertation. Some fields of specialization have additional requirements; consult departmental program statements. Relevant courses completed in other recognized graduate schools to a maximum of 30 points, or 45 points if completed in another Faculty of Columbia University, may be accepted toward the minimum point requirement for the degree. Each degree candidate must satisfy departmental requirements for the award of the M.Phil. degree prior to continuance in the Ph.D. program. These degree requirements are specified in the "Requirements for the

Degree of Doctor of Philosophy," 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 Autumn and Spring term until all requirements are met unless granted a leave of absence. A candidate who expects to interrupt study for any reason should consult the Office of Doctoral Studies so as to avoid the risk of severing connection with the program. All candidates are required to register in residence in the Graduate School of Arts and Sciences through Teachers College and to pay a fee in the term in which the dissertation is defended.

Continuous Registration for Dissertation Advisement:—Ph.D Degree

Each Ph.D. student must register continuously for the course in doctoral dissertation advisement offered by the department following enrollment in the department's designated dissertation seminar course(s) or following the term in which the dissertation proposal was approved, whichever comes first, and continuing until all requirements for the degree are met. (See 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 TI8900-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. See section on Fees regarding dissertation advisement tuition.

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 for Visiting Scholar Privileges. Guidance and counsel to post-doctoral students are provided by the Registrar in cooperation with the College faculty. International students should contact the Office of International Services.

Registration Procedures

Students seeking course credit must be admitted by the Teachers College Office of Admission. For details, please refer to 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 inperson 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 [152 Horace Mann]. For security reasons, PIN numbers are not available over the telephone. 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 regular in-person registration periods, 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 degree 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. The form is available from the Office of the Registrar and must be recommended by the student's advisor and approved by the Registrar.

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 published in the Schedule of Classes 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 published in the Schedule of Classes 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.

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 FEES

Tuition and fee rates are set annually by the Board of Trustees. Beginning in fall for the 2002–2003 academic year, tuition for all regular courses is \$780 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's 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 web, or through the College's Touch-tone system. The fax must include the student's name, ID number, the credit cardholders' 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. The Touchtone system is available Monday through Saturday from 8:00 a.m. to 11:00 p.m. by calling (212) 678-3200. A personal identification number (PIN) and the student's identification (ID) number are required to access both the Touch-tone system and the web. To make payments on the web, visit our website @ http://www.tccolumbia.edu/ student-resources/ then click on the Student Information

Other Fees

Teachers College Fee	\$185
Teachers College Research Fee	\$185
Health Service Fee	\$258/\$258
Medical Insurance Fee	(Basic) \$630/\$829
	(Comprehensive) \$803/\$1095
Application Fee (non-refundable and payable at time of application)	\$50
Library Research Fee (for non-college users) per month	\$100
Continuous Doctoral Advisement registration fee	\$2340
Ph.D. Oral Defense fee	\$2870
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)	\$50
(monthly fee)	1-1/3% (16% annually)
Returned check fee	\$20
Deferred payment plan fee	\$50
Tuition deposit fee	\$250

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.

Systems link. Web payments can be made 24 hours/day 7 days/week. PINs are provided by the Office of the Registrar each semester.

Cash Payments—Must be made in-person at the Office of Student Accounts, 133 Thompson Hall. During the academic year, the Office of Student Accounts staff is available Monday through Thursday 9:00 a.m. until 6:00 p.m. and Friday 9:00 a.m. until 5:00 pm.

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 6, 2002) for the fall semester and (January 24, 2003) 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. 6, 2002)

Second Payment October 4, 2002

Third Payment November 4, 2002

Spring Semester

First Payment on or before (Jan. 24, 2003)

Second Payment February 14, 2003

Third Payment March 14, 2003 Failure to remit payment, as scheduled, in the Deferred Payment Plan will result in the assessment of a late payment penalty of 1 1/3 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 inperson 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 Student 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 "Student Aid Information."

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 1 1/3 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 Touch-tone system in a timely manner. The percentage of reduction will be determined according to the following schedule:

Fall 2002

Week ending	Percent of refund
September 16	100%
September 13	100%
September 20	80%
September 27	75%
October 4	70%
October 11	65%
October 18	55%
October 25	50%
November 1	40%
after November 2	2 0%

Spring 2003

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 Student Aid by the published deadline, and all

financial aid eligibility requirements must be met. For further information about financial aid, review the section entitled "Student Aid Information."

Financial Aid

Many students at Teachers College finance their educational expenses with federally guaranteed loans under the Stafford or federal direct loan programs. Students who are planning to apply for these loans must 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 Student 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.

General Regulations

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 an Autumn or Spring term equal

to one hour weekly in lectures or recitations or two hours in practical work, and (2) one-and-one-half 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 sixteen-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 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.

Visiting Scholars

The privilege of auditing courses, with permission of the instructor, attending open lectures, and on-premise use of the Milbank Memorial Library resources is extended to Teachers College doctoral alumni, to faculty from other colleges and universities, and to other persons with appropriate qualifications. To be eligible for visiting scholar privileges, an applicant must, (1) hold an earned doctorate, and (2) be on leave from the employing institution, as attested to by a written statement from an official of that institution.

No official records are maintained and no statement of activities is issued. For the Summer, Fall, and Spring terms, or any portion thereof of these terms, the fee is equivalent to three points of tuition. The fee is waived for Teachers College doctoral alumni.

Inter-University Doctoral Consortium

Teachers College participates in the Inter-University Doctoral Consortium which provides for cross-registration among member institutions. Fully admitted doctoral candidates in Teachers College may register for courses at the Graduate School and University Center of the City University of New York, Fordham University, New School University, and New York University. Ordinarily, such courses must not be available within Columbia University. Applications are available in the Office of the Associate Dean, 113 Main Hall.

Students taking cross-listed 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 to Teachers College for any such courses they take.

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
Yom Kippur
First days of Succoth
Concluding days of Succoth
Hanukkah
Id al Fitr
Passover
Good Friday
Id al Adha
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.

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. Students electing to be graded on a basis other than the ones announced by the course instructor must request the option and obtain the instructor's written approval not later than the close of the third class meeting. An application for grading options is obtainable from the Office of the Registrar and needs to be filed in the Registrar's Office no later than the close of the third class meeting. Once the option has been approved and filed with the Registrar, it is not subject to change.

All grades are final once submitted to the Office of the Registrar except for grades of "Incomplete."

Grades are defined as follows:

- A+ Rare performance.
 Reserved for highly exceptional, rare achievement.
- A Excellent. Outstanding achievement.
- A- Excellent work, but not quite outstanding.
- B+ Very good. Solid achievement expected of most graduate students.
- B Good. Acceptable achievement.
- B- Acceptable achievement, but below what is generally expected of graduate students.

- C+ Fair achievement, above minimally acceptable level.
- C Fair achievement, but only minimally acceptable.
- 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 three points of C- may be credited toward any degree or diploma. Students completing requirements for more than one degree or diploma may count three points of C- toward only one such award. A student who accumulates eight 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.
- 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, 148 Horace Mann. Once the option is approved, it may not be changed.
- 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 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 and Science Education 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. Used when attendance requirement has been met but granting of a grade has been postponed because, for

reasons satisfactory to the instructor, certain course assignments are outstanding. If the outstanding work is not completed within one calendar year from the date of the close of term in which the incomplete was received, the grade will remain as a permanent incomplete on the transcript. Extensions of time for completion, based upon compelling reasons, are to be recommended by the instructor and approved by the Registrar. If the assignments are completed within the year and a grade submitted, a final grade will be recorded on the permanent transcript. The original mark of Incomplete will not be expunged from the student's record.

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 College provides for individual student review of the official student folder as pro-

vided in Public Law 93-380. The College's policy on the student's review of an academic folder and the release of Student Directory Information is contained in the "Guide to Student Rights and Responsibilities," obtainable from the Office of the Associate Dean and published in the Student Handbook.

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 any grounds in which it deems advisable, subject to student appeal procedures where applicable as described in the "Guide to Student Rights and Responsibilities," obtainable from the Office of the Associate Dean and published in the Student Handbook.

Student Conduct Code

The official policy statement on student conduct, which was adopted on August 8, 1968, and amended on November 17, 1976, is as follows: "While Teachers College does not operate on the basis of detailed regulations and procedures, it does expect its members to observe traditional canons of scholarly discourse, academic behavior, and due process. Students as well as faculty are expected to exhibit the high level of personal integrity which society must demand of professionals. Teachers College uses as a guide the principles proposed in the Joint Statement on Rights and Freedoms of Students, drafted in 1967 by representatives of several educational organizations, including the American Association of University Professors, the Association of American Colleges, the U.S.

National Student Association, the National Association of Student Personnel Administrators, and the National Association of Women's Deans and Counselors.

"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 or impede the free flow of ideas or individual movement in Teachers 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. 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 from the Office of the Associate Dean and published in the Student Handbook, is available to all members of the Teachers College community. It provides details concerning the due process procedures which

New York State Teachers State-Level Aggregate and Summary Assessment Pass-Rate Data for Certification Examinations 1999–2000 Teachers College

Program	ATS-W (or NTE)**			LAST	Γ (or NT	E)***	Summary		
Completers*	Tested	Pass	%	Tested	Pass	%	Tested	Pass	%
	334	331	99	335	332	99	337	334	99

are required when a charge is made against a student. This publication also describes the procedures which are to be followed by a student who has a grievance.

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, which 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 equiped with card swipe access.

NYS Teacher Certification Examination Pass Rate Data

*Number of completers of the institution's teacher education programs leading to a provisional teaching certificate **Number and percent who passed/took either the NYSTCE Assessment of Teaching Skills-Written (elementary or secondary version) or the NTE (Praxis II) Professional Knowledge Test ***Number and percent who passed/took either the NYSTCE Liberal Arts and Sciences Test or both the NTE (Praxis II) Communication Skills test and General Knowledge Test

CAMPUS CRIME STATISTICS										
	1997	1998	1999	2000	2001					
Assaults	3	3	2	1	1					
Auto Theft	0	0	0	0	0					
Burglary	19	19	20	49	15					
Murder	0	0	1	0	0					
Robbery	1	1	1	1	1					
Sex Offenses:										
Forcible	0	0	0	0	0					
Sex Offenses:										
Non-Forcible	0	1	1	1	1					
Manslaughter	0	0	0	0	0					
Arson	0	0	1	0	0					



Housing and Residence Life at Teachers College

The Office of Housing and Residence Life extends a warm welcome as you consider joining our residential community. Teachers College offers a variety of on-campus housing options that are unique to our community and conveniently located to campus. We support the institutional mission of the College by providing housing that is convenient and affordable for students and faculty. The principles of student development, multiculturalism, and management are reflected in our commitment to meet the unique needs of our diverse graduate residential population.

There are a variety of housing options for single students and students accompanied by spouses, domestic partners, and families. Teachers College has approximately 450 spaces available for single students and 150 apartments for students with families. The buildings are located in a vibrant urban neighborhood, and the apartment units are in typical New York City apartment houses.

Eligibility for Housing

In order to be eligible for student housing, students must be enrolled in a degree program at Teachers College and registered to take classes. To maintain eligibility, residents must be registered for a minimum of 24 credits (or have full-time equivalency) during a 12 month period beginning with the fall semester. Housing Contracts extend for one calendar year, beginning with the summer semester. Any resident who completes 24 credits during the fall and spring semesters combined (or 12 credits during the spring semester for those who begin residency in

the spring) are not required to register for summer sessions and may remain in the residence halls, providing that s/he has not completed degree requirements and that s/he intends to re-enroll for the upcoming fall semester.

When to Apply for Housing

Housing offers are based on availability of units, geographic priority, and date of receipt of application. Applicants outside a 50-mile radius of the greater Manhattan area have the highest priority for housing.

The following priority dates are recommended for submitting a housing application:
For Fall term entry:
February 1st
For Spring term entry:
September 1st
For Summer term entry:
December 1st

Please note: Students are encouraged to apply prior to the priority dates listed above and may apply for housing up to one year in advance of the term they seek housing. Unfortunately, given the limited number of spaces available, we are unable to accommodate all requests for housing.

Housing Assignments

Students will be notified by the Office of Housing and Residence Life of their housing status once offers are made for the semester for which they have applied. Each student's assignment letter contains information regarding the unit to which the student has been assigned. This information includes the type of unit, the semester housing charge, the mailing address, and the telephone number. Also, information regarding check-in dates

and times will be enclosed. Notification that a housing space is available will be accompanied with a Housing Contract and other documentation, which must be returned along with a \$500 housing deposit to hold the space. This deposit is held in an interest bearing account for the duration of the student's residence and may not be used for semester housing charges.

Every effort is made to try and accommodate each applicant's housing preferences. There is a transfer period after the semester begins in which students may request a change of assignment. Students may choose to exercise the transfer option if the College was unable to accommodate the original request or if they so choose.

Applications will be processed beginning: May 15th Fall Term November 15th Spring Term March 15th Summer A Term April 15th Summer B Term

Once offered an assignment in Teachers College housing, the housing application may not be deferred to another semester. Hence, the applicant would need to submit a new housing application and fee for the desired semester.

Single Student Housing

Two buildings are available for single-student housing. These are the Greystone Hotel and Whittier Hall.

The Greystone Residential Hotel is located on the Upper West Side of Manhattan at 212 West 91st Street and Broadway. Teachers College leases approximately 20% of the fifteen-floor building. The

remainder of the building is leased by other colleges and by private tenants. Front desk and security officers are provided by the building. Each unit is a furnished, self-contained space with a private bath and limited cooking facilities. The average size of each unit is 11.5 feet x 19 feet. Complete cooking facilities are located in the student lounge, which is outfitted with a microwave, full-size oven, and a dining table. A TV room is adjacent to the lounge. Residents must provide their own cooking utensils and other household items. Pets are not permitted. The building is located near an express subway stop and two bus lines. It is approximately a 30 minute walk or a 20 minute bus ride to the Teachers College campus.

Whittier Hall is located at 1230 Amsterdam Avenue (at the corner of 120th Street). There are several different types of housing accommodations offered in this residence hall. All assignments include a private bedroom. Room sizes vary in all accommodation types.

In the single rooms, kitchen and bathroom facilities are shared by approximately 20 students. Suites are self-contained units with three to six private bedrooms. Residents of suites share a kitchen, bathroom, and common area. Efficiency units, one and two bedroom apartments, and studio units all have a private bathroom and kitchen. Microwaves are provided for students in suites, efficiencies, studios and one and shared two bedroom apartments. A microfridge (a microwave attached to a refrigerator unit) is provided in the single rooms.

All single student housing units are furnished. Residents must, however, provide their own linen, cooking utensils, and other household items. Telephone service and voice mail are provided by the Teachers College Office of Telecommunications. Telephones, unlimited local calls, caller ID, cable TV, and computer data hook-up are provided in each unit.

Single Student Housing Average Semester Rates (2002–2003 Academic Year)

	Average
Academic Year	Semester
2002–2003	Rate Range
Greystone Resident	tial Hotel:
Efficiency	\$4,085
Whittier Hall:	
Single Room	\$2,695
Suite Room	\$3,075
Efficiency	
(limited	
availability)	\$4,255
Shared Two-bedroo	m
(limited	
availability)	\$3,760
One-bedroom	
(limited	
availability)	\$5,560
Studio (limited	
availability)	\$5,585

Please note: Rates are subject to change and typically increase 4% each year.

Family Housing

Family housing is available for both traditional and non-traditional families. Traditional families are defined as two spouses, both of whom will be in the residence (with or without children) or a single parent with one or more dependent minors. Non-traditional families are two adult domestic partners (with or without children) who present evidence, as described below, of a long-term relationship.

Family Housing Eligibility

To be eligible for family housing, students must demonstrate that the applicant and the individual(s) with whom the applicant is applying to reside together share a qualifying family relationship. Qualifying family relationships under current policy include the following: (a) marriage, (b) presence of minor or dependent child, or (c) domestic partnership, i.e., a long-term relationship between the two adult domestic partners. Relationships that do not qualify for family housing status include: parents, grandparents or siblings of applicants, other than a minor sibling for whom the resident is the legal guardian.

Documentation of Family Status

All persons applying for family housing must submit proper documentation along with their application. The following are acceptable forms of documentation:

- 1. Copy of a current marriage certificate.
- 2. In the case of a single parent, birth certificate(s), adoption papers, or other appropriate documentation of legal guardianship.
- 3. Notarized affidavit declaring that the applicants share a domestic partnership. The approved affidavit form is included in the application.

In addition, those who apply as Domestic Partners must include one of the following with the housing application:
a. Copy of a joint lease naming and signed by both applicants and their landlord;
b. Joint tax returns for one calendar year immediately preceding the application;

- c. Notarized letter on bank letterhead signed by a bank officer indicating a joint saving and/or checking account for at least one calendar year;
- d. Affidavit of Domestic Part-

nership from New York City or any city, which registers unmarried couples who are in a committed, ongoing family relationship.

Family Housing Options

Teachers College maintains three Family Housing units: Bancroft, Grant, and Sarasota Halls. One-bedroom apartments are assigned to families with one or no children. Due to limited availability, two and three bedroom apartments are typically available for families with children. All apartments are provided furnished, unless prior arrangements have been made.

Grant and Sarasota Halls, located at 514 and 512 West 122nd Street, respectively, are six-story buildings with four apartments on each floor. The two front apartments have an entry foyer, living room, bedroom, kitchen, and bathroom. The two rear apartments have a long hallway with the bedroom, kitchen, bath, and living room opening into the hallway.

Bancroft Hall, located at 509 West 121st Street, is an eightstory residence hall with 108 apartments. Each unit has a bathroom, living room/dining room area, kitchenette, and bedroom(s). The front apartments face 121st Street and are slightly larger. Rear apartments face a courtyard, which connects Bancroft to Grant and Sarasota Halls. A desk clerk and/or security officer is on duty 24 hours a day at the Bancroft Hall front desk.

Housing rates vary according to the size and location of the apartment. Residents must pay monthly long distance phone bills and electric charges. Heat and hot water is provided at no additional cost. Unlimited local calls, caller ID, cable modem (for high speed internet access), and cable TV service is included in the housing rates.

Family Housing Average Semester Rates (2002–2003 Academic Year)

	Average
Academic Year	Semester
2002-2003	Rate Range
1 Bedroom Apa	rtment \$6,045

2 Bedroom Apartment \$6,400

3 Bedroom Apartment (limited availability) \$7,200

Please note: Rates are subject to change and typically increase 4% each year.

Important Information

- The housing application and \$20 application fee must be sent <u>directly</u> to the Office of Housing and Residence Life.
- The housing application will not be processed unless it is filled out completely. Supporting documentation and the \$20 application fee must accompany the application.
- Students may submit an application for housing even if they have not yet been admitted to a degree program. No offer for housing, however, will be made until students are officially admitted to Teachers College in a degree program and have paid the Admissions

 Deposit, as established by the Office of Admissions.
- The Housing Application is to be used only for Teachers College student housing. Persons interested in shortterm or summer housing only should contact the Office of Housing and Residence Life at 212-678-3235.

- Students who plan to move out for the summer sessions must reapply for housing.
 Please note that space is <u>not</u> <u>guaranteed</u> and students should submit an application as soon as possible.
- Students are responsible for notifying the Office of Admissions of any changes in mailing address, telephone number, and/or email address.
- Housing applications are only considered for the initial semester for which a student applies. The Office of Housing and Residence Life must be notified in writing if a student decides to defer an application. The application will be considered for the requested semester. A housing application may be deferred for a maximum of one year, provided an assignment was never offered.

Contact Information

- Location: 1230 Amsterdam Avenue, next to the Teachers College Bookstore
- Mailing Address: 525 West 120th Street, Box 312, New York, NY 10027
- Phone: 212-678-3235
- Fax: 212-678-3222
- Email: housing@exchange.tc.colum bia.edu
- Website: http://www.tc.columbia.edu/ ~administration/res-life/

Who Should Use This Application?

- FIRST-TIME applicants for admission to master's, advanced master's, or doctoral degree status.
- Former Teachers College students who have not registered for (five) 5 or more years and are applying for admission to degree status (whether or not a degree has already been earned).
- Applicants to post-doctoral non-degree programs.
- Applicants who applied two
 or more years ago to Teachers
 College, but never enrolled.
 (The Office of Admissions
 holds incomplete applications and applications for
 those who were admitted but
 did not enroll for only two
 years.)
- First time applicants to nondegree status may use either this form or the Non-Degree Application.

The following students should use the "Reapplication for Admission" (obtained in the Office of Admission, Room 146 Horace Mann):

- Those who are currently registered at Teachers College who wish to pursue further study (either in a different program or a different degree).
- Former Teachers College students who have been registered in the last five years and wish to apply to a degree program.

Please Note: Former Teachers College students who wish to register as a non-degree students only should go directly to the Office of the Registrar during Registration for information about registration procedures.

The Self-Managed Application Process

Applicants should collect and submit all letters of reference and transcripts with their application as well as any other supporting documents in the enclosed return envelope addressed to Teachers College.

Please request that official copies of any required standardized test score report such as the GRE, MAT, or TOEFL, be sent directly to the Teachers College Office of Admission by the Testing Centers. To expedite an application, the applicant may submit an unofficial copy of her/his test scores with the application if she/he has already taken the test. For GRE, TOEFL, or other tests administered by the Educational Testing Service, the assigned institution code for Teachers College is 2905.

Components of the Complete Application

The completed application package should include the following items:

- 1. Completed application form (included in this Catalog).
- Personal Statement, typed on a separate piece of paper. (See "Personal Statement" below.)
- 3. The sealed and signed envelopes containing the official transcripts of the schools the applicant has attended. (See "Transcripts" below.)
- 4. The sealed and signed envelopes containing the letters of reference. (See "Letters of Reference" below.)
- 5. Any additional requirements an applicant needs to submit for her/his intended area of study (e.g., writing sample). Please refer to the individual program information sections of this Catalog to determine other requirements.

6. A check or money order in U.S. dollars and drawn on a U.S. bank made payable to Teachers College in the following amounts:

\$60 New applicants \$35 Former Teachers College students

Please note:

Applicants to Teachers may apply to only one program at a time.

Only applications completed with all supporting material by the deadline will be acted upon.

Under no circumstances will an application submitted to the Office of Admission be returned to the student or forwarded to a third party.

Deadlines

See pages 105–106, entitled "Admissions Application Deadlines," for information.

Please note that admissions application deadlines always refer to the date by which the application must be complete, i.e., the date by which the Teachers College Office of Admissions must have received the application, application fee, personal statement, resume, official transcripts, recommendations, test scores, and any other supporting material required by the department.

Notification of Decision

The Office of Admission will notify the applicant once the application is complete. The length of the application review process varies from program to program. The official notification of the decision is the letter bearing the signature of the Director of Admission. Applicants will be notified of the admission decision by mail only. Decisions will not be given over the telephone or by

email. Applications not received by the deadline date may be held for review for the next available semester.

In order to ensure a place in a program, admitted students must return the Admissions Response Form which accompanies their letter of admission, with a \$250.00 (U.S.) check or money order payable to Teachers College. This non-refundable admission deposit is due one month from the date at the top of the admission letter. Upon enrollment this deposit will be credited to the student's account.

Transcripts

First-time applicants to the College must submit one official transcript from each college or university in which they were enrolled for any period of time, showing all courses, grades and degrees received, if any. Applicants should request that the transcript(s) be returned to them in a sealed envelope with the signature of an authorized official across the seal. Please send only ONE transcript per school attended.

If there will be a delay in sending the official transcript, an applicant may submit a legible photocopy pending receipt of the official record by Teachers College. Student copies of transcripts run from a university web site are not acceptable.

Under no circumstances will transcripts be returned to an applicant or forwarded to another college, university, or place of business. All records submitted in support of an application for admission become part of a student's permanent record at Teachers College.

Letters of Reference

Please submit two letters of reference (unless a third is required-see "Special Application Requirements/Information" section of program description). Write the name, title, address, and telephone number of each reference in the space provided on the Application for Admission.

Letters of reference should be written by people who can comment from personal knowledge on the applicant's academic or professional qualifications for graduate study. Wherever possible, letters of reference should be submitted from academic sources. If, however, an applicant has been out of school for a number of years, she/he may substitute professional references. References written by family members or friends are not appropriate for the purposes of this application.

Applicants should present the reference forms included in this Catalog to the people writing the references. (Please use photocopies of the form, if necessary.) Each recommender must enclose the letter in an envelope, seal the envelope, sign across the seal, and return the envelope to the applicant. Applicants should include the envelopes, unopened, in their application package. If the person writing the reference prefers to send it directly to the Office of Admission at Teachers College, she or he may do so. If they choose not to use the form provided, the reference must be written on official letterhead and must be signed. Unsigned reference letters will not be accepted. A credentials file at a previous college or university may be submitted to fulfill the letters of reference requirement. However, if an applicant has been out of school for five or more years, she/he should submit one additional current letter of reference.

Letters of reference are used for admission and scholarship review in the applicant's intended field of study only. All letters of reference are destroyed after the review process. Under no circumstance will letters of reference be returned to an applicant or forwarded to another college, university or place of business.

Personal Statement

On a separate sheet of paper, applicants should write a brief statement of about a page or two in length describing their background, past work in the intended field of study, plans for graduate study and a professional career, or any other information they feel is relevant. Applicants who are currently registered in a graduate program at another university should explain why they wish to leave.

The personal statement is an important part of the application review process. Please take the time and care to present a carefully planned and written statement. The personal statement should be typed. If it is not possible to type it, please print or write legibly.

Standardized Tests

Applicants should refer to the program information in this catalog to determine whether standardized tests [the Graduate Record Examination (GRE)-General and/or Subject, Miller Analogies Test (MAT), the Test of Written English (TWE), or any other test, are required in the intended field of study. Applicants are encouraged to take any required standardized tests well before the application deadline for the program to which they are applying. Results of the GRE should not be more than five years old.

The TOEFL is required of all applicants whose first language

is not English and those who have received a bachelor's degree from any country or university where English is not the official language of instruction. The results of this examination should not be more than two years old. The minimum TOEFL score required by most departments is 600 on the written test and 250 on the computer-based test. Applicants may obtain an application from their local U.S. Information Service counseling or binational center or by writing to: Test of English as a Foreign Language, Box 899, Princeton, NJ 08541, USA.

Applicants may also submit scores, not more than two years old, from the Certificate of Proficiency of English (CPE) or the International English Language Testing System (IELTS). The minimum overall grade required on the CPE is a B or better. An overall score of 7.5 or above is required on the IELTS. Both exams are offered by the University of Cambridge Local Examinations Syndicate (UCLES). Applicants may request further information about these tests from: UCLES, 1 Hills Road, Cambridge CB1 2EU, United Kingdom. Telephone: 01223 553311. Fax: 01223 460278. Email: guymer.1@ucles.org.uk.

If an applicant is in New York City when she/he applies, she/he may take the Columbia University English Placement Test (EPT) instead of TOEFL. The minimum EPT score is level 10 on both sections of the examination and should be no more than two years old. Telephone (212) 854-3584 to make an appointment for the test, and inform the Office of Admission of the date the test will be taken. Make certain that the results of the EPT are forwarded to the Office of Admission.

Students who require nonstandard administration of the tests should consult with the Office of Services for Students with Disabilities at (212) 678-3689 V/TDD for information about such accommodations.

International Students

International students must submit detailed school records of all subjects taken and examinations attempted for all university or other tertiary level work completed plus proof of graduation, where available. These records may have various names in other countries such as releve de notes, mark sheets, student book, etc. In the United States they are called "transcripts." All records should show dates of attendance, subjects studied, grades (marks or final assessments) received, hours per week spent in lectures, and degrees or diplomas awarded. Official records in the native language must be submitted with certified word for word English translations (where appropriate). Foreign language records will not be accepted without both the translation and official copy of the original. Course descriptions may be required later for determining advanced standing or degree equivalency, but are not required at the time of application.

If a school an applicant attended is no longer in existence or it is impossible for her/him to obtain official documents from a school she/he has attended, the applicant should have the Ministry of Education of that country furnish an official statement testifying to the impossibility of obtaining records. The Ministry should also supply Teachers College with a list of courses ordinarily required in the degree program an applicant has followed in that school or university.

To be reviewed for admission to Teachers College, international students must have earned, at least, the equivalent of a U.S. bachelor's degree. Applicants who do not have the equivalent degree will not be considered for admission. The Office of Admission will review all credentials and determine bachelor's degree equivalency. Incomplete records will not be reviewed for admission. Students who have earned a bachelor's degree or its equivalent from a college or university where English is not the official language of instruction must take the TOEFL, the CPE, the IELTS, or the Columbia University English Placement Test (see "Standardized Tests" section).

Papers necessary to obtain a student visa are sent only after an applicant is officially admitted to Teachers College and has submitted the financial affidavit (enclosed for international students) certifying that she/he has the necessary funds to meet the cost of study at Teachers College. Holders of the student visa (F-1) are required to study full-time, i.e., at least 12 points per semester.

Be certain that any form not issued in English is accompanied by a notarized English translation.

Immunization Requirements

New York State law requires college students to be immunized against measles, rubella, and mumps. The law applies to all students born on or after January 1, 1957. Beginning in the Autumn term of 1991, graduate students will have to show proof of immunity. Proof of immunity consists of:

• For measles-two doses of live measles vaccine administered after 12 months of age, physician documentation of measles disease, or a blood test showing immunity;

- For rubella (German measles)one dose of live rubella vaccine administered after 12 months of age or a blood test showing immunity;
- For mumps-one dose of live mumps vaccine administered after 12 months of age, physician documentation of measles disease, or a blood test showing immunity.

Students should check their immunization records with their health care provider to be certain they meet these requirements. For further information, contact the local health department or Director of Student Life, Teachers College, 525 West 120th Street, Box 308, New York, NY 10027; telephone: (212) 678-3406.

Transfer Credit

Only graduate courses which have been (1) completed with grades of B or higher, (2) submitted on an official transcript from a regionally accredited institution, and (3) having been granted/assigned credit on the transcript of that institution, may be considered for transfer. Transfer credit is awarded at the discretion of the faculty advisor. For the Master of Education and the Doctor of Philosophy, a maximum of 30 points completed outside of Teachers College may be transferred. For the Doctor of Education, up to 45 points may be transferred; moreover, for the Doctor of Philosophy, up to 45 points completed in another faculty of Columbia University may be transferred. No transfer credit is awarded for Master of Arts students.

Admission as a Non-degree Student

For admission to non-degree status, applicants must file an application for non-degree status, provide evidence (transcript, or photocopy of their diploma) that they hold a baccalaureate degree from a

regionally accredited institution, and pay the \$60 nonrefundable application fee. There are no deadlines for admission to non-degree status. Applicants may register as a nondegree student on the day of registration. Students may continue to take courses for credit in a non-degree status as long as they meet the academic standards of the College. However, should a student become a degree candidate, only 16 credits taken in non-degree status may be accepted toward degree requirements, and only 8 of these credits may be credited toward minimum requirements in the major field.

Special Needs

Students with special needs are invited to request information and assistance from the Office of Access and Services for Individuals with Disabilities, Teachers College, 525 West 120th Street, Box 105, New York, New York 10027. Telephone: (212) 678-3689. The office is located in the lobby of Thorndike Hall.

Deferral of Admission

Students may defer their admission to a Master of Arts, Master of Education, or Master of Science degree program for up to two years. Those admitted to doctoral programs must have the permission of the program to which they were admitted to defer an offer of admission. Requests for deferral of admission must be made in writing to the Office of Admission.

The goals of the student aid program at Teachers College are to reward excellence through merit-based aid and to ease the cost barrier to attendance through scholarships and need-based programs including grants, Federal loans, and the Federal Work-Study Program. A student must be enrolled at least halftime (6 points or the equivalent) in a degree program in order to receive Federal Aid. The Teachers College Financial Aid website is updated frequently. Please visit the website 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/ 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:

- Except for points awarded as part of a graduate assistantship, 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 15 points or more of tuition exemption annually may not receive Teachers College scholarship aid, unless the

scholarship they receive derives from a publicized academic competition (i.e. W. Sindlinger Writing Award) in which recipients have been selected via committee.

General Scholarships Based upon merit, all students are eligible for Teachers College General Scholarships. Program faculty committees make these award decisions.

Minority Student Scholarships Teachers College Minority Scholarships are available to U.S. citizens and eligible noncitizens who identify themselves on the admissions application as being a member of a federally recognized U.S. ethnic minority group, or as having a federally recognized disability. A minority status must be identified on the admissions application. Students who leave their minority status blank on their admissions application will not be considered for this scholarship. Students with disabilities must be registered with the Teachers College Office of Services for Students with Disabilities. Program faculty committees make these award decisions based upon academic merit.

International Student Scholarships Teachers College International Student Scholarships are available to international students only. The award process is competitive. Program faculty recommend students for these awards to their academic program and departmental scholarship committees.

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.

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.

Graduate Assistantships Students who are employed as graduate assistants (payroll category 6181) earn a stipend 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, or one semester beyond.

Grant-in-Aid is awarded primarily to doctoral students during the last two semesters

Grant-in-Aid

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 Student Aid or at www.tc.columbia.edu/financialaid/Forms/ forms.htm. The Grant-in-Aid committee meets monthly from September to June to make awards decisions.

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.

This is a partial list of endowed scholarships.

Jaffe Scholarship This scholarship will support at least two full time students with a preference given to minority candidates. This scholarship is available to new students only.

Jewish Federation for the Education of Women (JFEW) For three full-time female preservice 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.

Magsaysay/Boxley Scholarships These scholarships provide ten full time students who are applying to teacher certification programs and who demonstrate financial need and dedication to classroom teaching, with full scholarships covering tuition and fees for the duration of their master's work. Only students applying for an MA in a pre-service teacher education program are eligible for this award. This scholarship is available to new students only.

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 Board of Education and teach in New York City Public Schools. Additional information may be obtained by visiting the website at www.tc.columbia.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(s) 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 halftime 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 TOC Program Office at (212) 678-3471 or 3466.

Selected External Scholarships, Fellowships and Grants

- 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 foundation.org.
- AT&T Labs Fellowships and Grants

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 www.research.att.com/academic/alfp.html.

- 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.
- Kodak Education Technology Grant Program Supports innovative curriculum projects incorporating imaging and computer technologies that test new ways to increase the effectiveness and productivity of teaching and learning processes. This program provides Kodak products, cash and in-kind service to academic institutions. More information is available at www.kodak.com/US/en/corp/ community.shtml.

tance Program
Provides grants to eligible local
educational agencies and consortia of such agencies to support magnet schools that are
part of approved desegregation
plans. More information is
available at ocfo.ed.gov/fedreg/

grantann/q300/073100b.txt.

• The Magnet Schools Assis-

- Edward G. Begle Grant for Classroom-Based Research Supports collaborative classroom-based research in pre-college mathematics education. More information is available at www.nctm.org/about/ met/begle.htm.
- New York Tuition Assistance Program (TAP) The New York Tuition Assistance Program awards funds to residents of New York State who are attending an approved postsecondary institution in New York full-time. More information is available at www.hesc.state.ny.us/tap.html.
- American Association of School Administrators: Graduate Student Scholarships
 This scholarship is open to graduate students who intend

graduate students who intend to pursue the public school superintendency as a career. For more information Email: dpierce@aasa.org.

- Dale Seymour Scholarships, Grades K–12 Teachers Awards given to persons currently working at the grades 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/.
- Ernest Duncan Scholarships, Grades K–12 Teachers Awards are given to persons currently working at the grades K–6 level to improve their own professional competence as a

- classroom teacher of mathematics. More information is available at www.nctm.org/about/met/.
- National Science Teachers Association—www.nsta.org/ programs/
- American Educational Research Association (AERA) www.aera.net/anews/ compete.htm.
- 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.
- 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.orau.org/nsf/nsffel.htm or email: nsfgrfp@orau.gov.
- Ford Foundation Minority Doctoral Fellowships Three-year predoctoral and 12-month dissertation fellowships. More information is available at www4.nas.edu/ osep/fo.nsf.
- International Predissertation Fellowships (Social Science Research Council)
 To encourage social science students early in their graduate careers, especially in economics, political science, and sociology, to develop internationally oriented research careers that focus on Africa, China, Latin America, the Near and Middle East, South Asia, and Southeast Asia. More information is available at www.ssrc.org/fellowsh.htm.

- 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/.
- 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/.
- National Collegiate Athletic Association (NCAA) Postdoctoral Research Fellowship The NCCA seeks an outstanding individual for a one-year postdoctoral fellowship (with the possibility of a second-year reappointment) in applied educational research. Applicants should have a background or interest in national educational policy issues such as trends in academic preparation and outcomes of postsecondary students. More information is available at http://www.ncaa.org/ human_resources/benefits.html
- 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/about/ whatwedo/awards/ or Email: gkeating@reading.org.
- Eleanor Roosevelt Teacher Fellowships
 Teacher Fellowships are available to female K-12 public school teachers as individuals or as lead members of teams.

More information is available at www.aauw.org/3000/fdnfelgra.html.

• 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

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.

- 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/ scholarships.htm.
- 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 www.pdsoros.org.
- 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.

Loans

There are several types of student loans available to Teachers College students. To qualify for any of the federal 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 Teachers College by securing a co-signer who is a U.S. citizen or permanent resident. Consult with a student aid counselor for more information.

There are a number of 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 Perkins but sometimes Stafford loans.

If a student receives a federal loan, she/he must participate in a Loan Entrance Interview before receiving the initial funds, and a Loan Exit Interview before graduating, leaving Teachers College, or dropping to less than half-time status. The Entrance Interview will review the terms and conditions of the loan, and the Exit Interview will cover repayment, deferment and consolidation options. Loans are processed during the semester a student is enrolled. For additional information on student loans please visit our website at www.tc.columbia.edu/ financialaid/.

Teachers College General Loan
Students who demonstrate
need and are enrolled at least
halftime or the equivalent may
be eligible for Teachers College
General Loans (TCGL). If a
student receives a TCGL, the
funds will be credited each
semester after the student has
signed a promissory note. The
promissory note must be completed in the Office of Student

Accounts. While repayment of the principal is deferred until six months after the student leaves Teachers College, interest accrues at a rate of 9% annually from the day the student signs the promissory note. Information on the loan process and repayment options can be obtained from the Office of Student Accounts in 133 Thompson Hall. Repayment may take up to 4 years.

The following loans require a Free Application for Federal Student Aid (FAFSA) and a separate loan application or promissory note. To ensure consideration for the Perkins Loan and the Federal Work-Study programs, it is recommended that the FAFSA be filed by March 1st. In order for Stafford loans to be processed in time for the beginning of the Fall semester, applicants are urged to file the FAFSA by April 30th.

Federal Perkins Loan Federal Perkins Loans are awarded on the basis of exceptional need from a limited amount of federal funds allocated to Teachers College. Students must be enrolled at least halftime (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 interest rate of 5% begins to accrue at the same time payments begin. Repayment may take up to 10 years.

Stafford Loans

Direct and FFEL Stafford Loans are the Department of Education's major form of self-help aid for Teachers College students. Direct Stafford Loans are available through the William D. Ford Federal Direct Loan (Direct Loan) Program and

FFEL Stafford Loans are available through the Federal Family Education Loan (FFEL) Program. The terms and conditions of a Direct Stafford or a FFEL Stafford loan are similar. 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.

Direct and 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 are charged interest from the time the loan is disbursed until it is paid in full. If the interest is allowed to accumulate, it will be capitalized, that is, 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.)

The amount given above is the maximum yearly in both subsidized and unsubsidized loans. 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

Limit: 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 needbased loans or who may need additional funding. They are often available from banks, and require a processing fee, a credit check, and in some cases, a co-signer. Securing a cosigner can result in lower interest on the loan. For information on banks that have preferred lending agreements with Teachers College please visit our website at http://www.tc.columbia.edu/ financialaid/.

Loan Cancellation and/or Deferment
There are a number of 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 Perkins but sometimes Stafford loans.

The most common cancellations are Perkins and qualifying Stafford loans for teachers working full-time in federally designated teacher shortage areas. These public and other non-profit private elementary and secondary schools are located in school districts that qualify for funds under Chapter 1 of Title I of the Elementary and Secondary Education Act.

Loan payments can also be deferred for teacher service in federally designated teacher shortage areas. For example, the New York City Board of Education offers further programs to help fund a student's education.

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 Board of Education Incentive Programs: http://www.teachny.com/html/ programs/incentive.html
- United States Department of Education Teaching Service Cancellation/Deferment Options: http://www.ed.gov/offices/OSF AP/Students/repayment/ teachers/index.html
- 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 Perkins loan cancellation: http://www.ed.gov/offices/ OSFAP/Students/repayment/ teachers/search_t00.html

The following is a list of contact people in the Departments of Education for states in geographic proximity to Teachers College:

- New York (NY) Kevin McCarthy, Associate Educational Data Systems New York State Education Department Washington Avenue, Room 863, EBA Albany, NY 12234 (518) 474-7965
- New Jersey (NJ) David Joseph, Director IRM New Jersey Department of Education Trenton, NJ 08625 (609) 984-6617
- Connecticut (CT) William Choquette Senior Research Analyst Connecticut State Department of Education P.O. Box 2219 Hartford, CT 06145-2219 (860) 566-2284
- Pennsylvania (PA) Jeanne Hobaugh, Statistician Pennsylvania Department of Education 333 Market Street Harrisburg, PA 17126-0333 (717) 787-2644

Those who plan to teach in a state other than those listed above should visit the following web site:

• http://www.ed.gov/offices/ OSFAP/Students/repayment/ teachers/tsa.html

Student Employment

Opportunities for student employment are available at Teachers College. Students should inquire at the Teachers College Human Resources Office and with program faculty for a list of current vacancies. Many positions offer tuition exemption or scholarship points.

Federal Work-Study Subsidized employment is also available through the Federal Work-Study program. Federal Work-Study is awarded to students based on need. To apply, students must complete the FAFSA and be enrolled at least half time (6 points or the equivalent) in a degree program. A work study award means that the student is entitled to a job on or off campus, earning an hourly wage up to the amount of the award during that academic year. Only agencies which have an existing contract with Teachers College may offer students off campus work-study employment. Students must seek placement assistance from the Teachers College Human Resources Office.

Graduate Assistantships Students who are employed as graduate assistants (payroll category 6181) earn a stipend 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, or one semester beyond.

New York State 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 government permission to release information to New York State. For more information call New York State poration (NYSHESC) at (518) 474-5642 or (800) 642-6234.

How to Apply for Aid

U.S. citizens and Eligible non-citizens

All students are encouraged to file a Free Application for Federal Student Aid (FAFSA), regardless of eligibility for Federal Aid. The FAFSA is available by January of each year from the Office of Student 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 Student 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 The Teachers College Catalog sent to you by the Office of Admission will contain infor-

file a FAFSA, giving the federal Higher Education Services Cor-

Departments make scholarship decisions based on the degree applications of the new students and on the Teachers College academic records for the continuing students. There is no official scholarship application for new students, although some scholarships do

require demonstration of finan-

mation about scholarships and

grants, loans, student employ-

ment, and the application pro-

cedure for student aid.

Continuing Students

cial need.

Continuing students must file the FAFSA for each year that they wish to be considered for financial aid. Continuing students must also file the Teachers College Continuing Student Scholarship Application by Feb. 1 to be considered for internal scholarships in the following year.

International Students International students should 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 Student 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 student 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 credit 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 want to download a brochure that explains the options. The brochure, "New Tax and Savings Options for Education," can be found at the following website: www.tiaacref.org/taxfile.pdf.

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 fulltime, three-quarter time, and half-time enrollment. If enrollment plans change during the academic year, students should notify the Office of Student Aid in case it becomes necessary to adjust the aid package.

To receive priority consideration for scholarships, new students must complete their admissions application by the following deadlines:

Term	Degree/Programs	Deadline
Spring 2002	All degree levels	Nov. 1st
Fall 2002	All Ph.D. programs, all psychology Ed.D. programs	Dec. 15th
Fall 2002	All Ed.D. programs except for psychology programs	Jan. 2nd
Fall 2002	Master's Programs	Jan. 15th

During the 2001–2002 academic year, the estimated Fall/Spring budget for a full-time student enrolled for 24 points is:

Tuition and Fees	\$19,502
Living Allowance	11,083
Books and Supplies	2,400
Transportation	1,340
Miscellaneous	5,500
Total	\$39,825

The family contribution toward academic year living and educational expenses is then deducted from this budget. For example:

Budget	\$39,825
Family Contribution	-(4,620)
Need	\$35,205

After need is determined, the Office of Student 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	\$5,920
(\$740	per point)
TAP	500
Federal Work Study	5,000
Federal Perkins Loan	2,000
Federal Subsidized	
Stafford Loan	8,500
Federal Unsubsidized	
Loan	10,000
Total	\$31,955

If students cannot provide the full amount of the family contribution, some banks offer credit-worthy loans that can be used to finance the remaining cost of attendance. However, the total of all financial aid, including loans used to replace family contribution, cannot exceed the total cost of attendance.

How Aid is Disbursed

Scholarships are disbursed to a student's account on the first day of in-person registration once the student has registered in a degree program for the semester.

Federal loans are disbursed when a student meets the following criteria: 1) has been accepted in a degree program; 2) has registered for at least half time status each semester; 3) has completed an entrance interview; and 4) has completed verification of income and residency, if required.

Tuition, fees, account charges, and refunds are processed by the Office of Student Accounts, which is located in 133 Thompson Hall.

Additional Steps and Conditions Prior to Release of Funds

Prior Default: Students in default on a federal loan, or who owe a repayment on a Pell, SEOG, or SSIG grant cannot receive federal need-based aid until the status is cleared.

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 complete a minimum number of points per semester. For a full-time student, the minimums are:

The number of points required for students enrolled less than half time will be adjusted proportionately. Students who receive TAP will be monitored each semester. For federal aid purposes, students will be evaluated at the end of each academic year. Students who do not make satisfactory progress will not be eligible for federal aid. They may appeal if they believe there are mitigating circumstances.

Verification: Some students are selected for a process called verification, based on federal edit criteria plus random factors. If a student is selected, she/he will have to provide a copy of her/his federal income tax return and other documents. No funds can be disbursed until all required documents are submitted and processed.

Notification: Federal financial aid is offered to students via the Student Aid Award Letter issued by the Office of Student Aid. Teachers College scholarship award letters are also sent from the Office of Student Aid.

For More Information

Students are encouraged to visit our website at www.tc.columbia.edu/financialaid/, visit the Teachers College Office of Student Aid, located in Room 138, Horace Mann Hall, or call (212) 678-3714 to receive more information.

After this semester	1	2	3	4	5	6	7	8	9	10	11	12
Master's students must complete:	6	15	27	39	51	53	63	63	63	63	No longer eligible	
Doctoral students must complete:	6	15	27	39	51	63	75	87	90	90	Dissertation Advisement	
With at least this GPA:	2.5	2.5	3	3	3	3	3	3	3	3	3	3

Application For Admission

Columbia University Teachers College 2002-2003

Application for Admission

Teachers College, Columbia University

Please type or print	in black ink	U.S. So	cial Security Number				
Name	/E 2/ N		Fig. (C)		M: 1 // 27		
Title: Ms. ☐ Mi NOTE: Your app	ast/Family Name T. Other lication will be processor any other name or any	ed under tl	he name given above.	If you		of the institution	ons
Permanent Addre	ess						
		Number			Street	Α	pt. Number
City Home Telephone				Zip Code (New York State residents only: Coun Country			
Mailing Address	(if different from above	ve) Indicate	e date of termination, if	possib	le: Month Day	Year	
		Number			Street	A	pt. Number
Home Telephone	City		State		Country	Zip Code	
*	program to which you				e-mail		
 program		specia	ulization if required (see	progra	am descriptions)		T
For which degree are you applying? [check one] Master of Arts Master of Science Master of Education Non-Degree Doctor of Education Doctor of Education in the College Teaching of an Academic Subject Doctor of Philosophy For which term are you applying? [insert year] Jan. 20 May 20 July 20 Sept. 20							
		_	•			_	
Have you ever applied to Teachers College? Yes No If yes, when? Are you applying to a teacher certification program? Yes No Are you applying to an In Step Program? Yes No What would you like to teach?							
Subject: Grade level: _ Birth–2nd grade _ 3rd–6 grades _ 5th–9th grades _ 7th–12 grades Record of Preparation. Supply FULL information regarding ALL college preparation to date. LIST EVERY INSTITUTION in chronological order beginning with undergraduate institutions. NOTE: ANY AND ALL undergraduate and graduate work MUST be listed. Use additional sheets if needed and be sure that your name is on any additional sheet. FAILURE TO DISCLOSE THIS INFORMATION MAY RESULT IN THE CANCELLATION OF YOUR APPLICATION OR YOUR ADMISSION							
Dates of Attendance					Degree, Diploma		Date
Attendance	Institution and Loca	ition	Department/Major		Certificate, License, etc.	GPA	of Award
			DO NOT WRITE BELOW	THIS	LINE		
Admission Office:	Recommended I	II III	Pro Defer NR	ec	GSAS: Reco	mmended	☐ Nrec
					Signature		_ Date
Department: [☐ Recommended	☐ Pro	□ NRec		App Degree ND MA MS Decision AF AD AP Response PR NC DI Tuition Deposit Copies made / Letter Initial Date	AX RJ WL WD	DT □ \$60 □ \$35

Personal Statemes study, your plans fo		• •	_	ent descri	bing you	r backgrou	ınd, your	past work in	your intended field of
Record of Employ				sting of e	employme	ent and otl	ner signif	icant activities	S.
In which languag	ges do you have ad	lequate proficiency	to translate s	cholarly	material?				
Give the name, offi	icial position, add	ress and phone nu	mber of the pe	ersons yo	u have ask	ked to writ	te referen	ces:	
Nan	ne	Title			Addı	ress			Phone
Test Requirements	(Please see Admi	ssions Application	Instructions t	o detern	nine if test	t is require	ed.)		
TEST		GRE		N	IAT	TOEFL	TWE		Γ) Columbia's American ram (English Placement Tes
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Scores	VerbalQ	uantitative Ar	nalytical						
1	Advanced Test	Which Test?	_						
Be sure to request t	that official scores	be sent directly to	o the Office of	Admissi	on. The T	eachers C	ollege coo	le for both GF	RE & TOEFL is 2905.
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Are you a U.S. I	Permanent Reside	nt (i.e., hold a "gr	een card")?	☐ Yes	□ No				
Will you be atte	ending Teachers C	College on a studer	nt visa?	☐ Yes	□ No				
If Yes, check o	ne:			If No					
1	to TC for F-1 sta				visa statu you hold?				
☐ I will apply to TC for J-1 status (IAP-66) ☐ I will attend TC as a J-1 student sponsored by			- - - 	you noid:					
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Name	e of College/Unive	rsity	W	hat mark	ing scale	is used?		What is the eassing mark?	What is the highest mark obtainable?
I attest that the inf	ormation provide	d in this applicati	on is true.						
	Signed				Daı	te			_
Reminder: It is your r						deadline.			

A. To the Applicant

Please type or print your name and address and at line B, the name of the person you have asked to write the reference. This reference is to be used to support your application for admission to Teachers College. It will not be returned to you or forwarded to any other college, university, or place of business. This reference will NOT become a part of your permanent TC record. Once the review process is completed, the letter will be destroyed.

Applicant		
Address		
Department	Area of Specialization	(T
В: То:	(appl	icant to fill in appropriate name)

The above named person is applying for admission to Teachers College, Columbia University. You are asked to comment on the academic or professional qualifications of this applicant for graduate study. The information supplied on this form will be used for admission and financial aid purposes only. We suggest that you keep a copy for your records. This letter of reference will not become part of the student's permanent record. Once the review process is completed, the letter will be destroyed. This letter will not be returned to the student or forwarded to any other college, university, or place of business. Please return this form to the applicant in the envelope the applicant provides. Be sure that you have sealed the envelope and signed across the seal. The applicant will then forward to this office the sealed, signed, unopened envelope, as part of the completed application package, in the return envelope we have provided. (Please use both sides of this form if necessary, or attach a separate sheet with your official letterhead.)

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Please type or print your name and address and at line B, the name of the person you have asked to write the reference. This reference is to be used to support your application for admission to Teachers College. It will not be returned to you or forwarded to any other college, university, or place of business. This reference will NOT become a part of your permanent TC record. Once the review process is completed, the letter will be destroyed.

Applicant		
Address		
Department	Area of Specialization	(T)
B: To:	(appl	icant to fill in appropriate name)

The above named person is applying for admission to Teachers College, Columbia University. You are asked to comment on the academic or professional qualifications of this applicant for graduate study. The information supplied on this form will be used for admission and financial aid purposes only. We suggest that you keep a copy for your records. This letter of reference will not become part of the student's permanent record. Once the review process is completed, the letter will be destroyed. This letter will not be returned to the student or forwarded to any other college, university, or place of business. Please return this form to the applicant in the envelope the applicant provides. Be sure that you have sealed the envelope and signed across the seal. The applicant will then forward to this office the sealed, signed, unopened envelope, as part of the completed application package, in the return envelope we have provided. (Please use both sides of this form if necessary, or attach a separate sheet with your official letterhead.)

Teachers College Residence Hall Application

Completed application and \$20 non-refundable application fee must be sent to:

Teachers College, Office of Housing and Residence Life, Box 312, 525 West 120 Street, New York, NY 10027

Only complete applications accompanied by payment will be processed.

Name (First, Last):	Female: Male:
Last Name Address:	First Name
Telephone #:	
SSN/Student Id Number:	
I plan to move in: Fall (Sept.) Spring (Jan.)	Summer A (May) Summer B (Jul.) of Year
	g., 1 = most preferred, 2 = second most preferred, etc.). s consideration but not guaranteed.
Single Student Preferences	Family Housing Preferences
Whittier Hall Single Whittier Hall Suite Whittier Hall Efficiency (limited availability) Whittier Hall Studio (limited availability) Whittier Hall One Bedroom (limited availability) Whittier Hall Shared Two Bedroom (limited availability) Greystone Hotel Efficiency Circle one: Courtyard view Street view Circle one: Non-smoking Smoking Office Use Only:	(Note: Families with children are given preference for two and three bedroom apartments) Bancroft Hall One Bedroom Bancroft Hall Two Bedroom Bancroft Hall Three Bedroom (limited availability) Grant Hall One Bedroom Sarasota Hall One Bedroom Circle one: Courtyard view Street view List all family members who will reside with you. Name Relationship Age
	*All Family Housing Applicants: Please read all the information in Admissions Catalog regarding Family Housing eligibility and submit supporting documentation.
Special Note: Please list on a separate sheet of paper any specia	l circumstances/accommodations which may affect your placement.
The information on this application is correct. I understand th nonacceptance of application and/or noncontinuance in Teache	
Signature:	Date:

It is critical to keep your address up-to-date. If your address changes, please notify the Teachers College Admissions Office immediately by letter at: Office of Admissions, Teachers College, 525 W. 120th St., Box 302, New York, NY 10027. If your address is not current, your housing application could be adversely affected.

Affidavit of Domestic Partnership

(Complete only if required—See Family Housing Policy)

We, the undersigned, declare that we share a domestic partnership and a qualifying family relationship in accordance with the family housing policy of Teachers College, Columbia University, and the Office of Housing and Residence Life.

We specifically declare the following:

- 1. We share a long-term relationship with each other characterized by an emotional commitment and interdependence.
- 2. We are each other's sole domestic partner.
- 3. We are not related by a degree of kinship that would bar marriage to each other.
- 4. We are not married to anyone else.
- 5. We have shared with each other a primary residence and the common necessities of life for at least one full consecutive calendar year immediately prior to the date of our application for family housing.
- We are both competent to enter into a license and/or contractual agreement with Teachers College and the Office of Housing and Residence Life.
- 7. We agree that if our domestic partnership ends for any reason, we will immediately notify the Director of Housing and Residence Life; that the termination of this partnership will render us ineligible to remain in or to be considered for family housing; that we will vacate the premises upon written request of the Director of Housing and Residence Life either at the conclusion of the semester or within thirty (30) days, whichever is sooner;

- and the Office of Housing and Residence Life and/or the College are under no obligation to provide single student housing.
- 8. We understand that available family housing will be allocated and assigned according to rules and criteria established by Teachers College and the Office of Housing and Residence Life. If there are more applications for family housing than available units, we understand and agree that available units will be assigned to eligible applicants under rules and criteria established by Teachers College and/or the Office of Housing and Residence Life.
- 9. We understand and agree that this affidavit applies only to family housing assignments and renewals made through the current academic year, and that eligibility for subsequent family housing must be reestablished under policies then in effect. We hereby agree that if subsequent family housing policies render us ineligible to remain in or to be considered for family housing we will vacate the premises upon written request of the Director of Housing and Residence Life either at the conclusion of the semester or within thirty (30) days, whichever is sooner.
- 10. We agree to comply with all terms of the residence hall agreement and any and all rules that Teachers College and/or the Office of Housing and Residence Life may require for housing.
- 11. We understand that any misinformation certified to in this affidavit or provided in support of our application for family housing, will render our application and any assignment based upon it void. In such case we agree to immediately vacate the premises upon request of the Director of Housing and Residence Life.

(Printed Name and Signature of Teachers	College Student Applicant)	
	c Partner)	
(Fillited Ivallie and Signature of Domesti	C raither)	
(Date)		
This affidavit must be notarized		
Notary's Stamp:	(Date Notarized)	
	(Date Notarized)	

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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, age, or disability in the administration of its admission, employment and educational policies or scholarship, loan, athletic and other schooladministered 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, age, or disability 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 thereunder, to any policy, program or other activity of the College should be directed to Mr. Donald Dean, the Director of Human Resources, who serves as the College's Equal Opportunity Officer. Mr. Dean 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.

How to get to Teachers College

By Bus: Four bus routes include stops at West 120th Street: M4, M5, M11, M104

By Subway: Take the 1/9 local subway to the 116th Street Station; walk north on Broadway to West 120th Street. Teachers College is on the

north side of West 120th Street, between Broadway and Amsterdam Avenue.

By Car: The Henry Hudson Parkway (West Side Highway) is convenient to Teachers College. The highway can be reached from most of the main routes entering New York City. Whether driving north or south, leave the West Side Highway at the 96th Street exit; at the first traffic light turn left (north) onto Riverside Drive; at 120th Street turn right and go two blocks east to the College.

Parking: The following garages in the area will accept outside cars if you phone in advance.

E & B Operating Corp. 137 West 108 Street (212) 865-8315

Riverside Church Garage Riverside Dr. & 120 St. (212) 870-6736

Upper Westside Garage 234 West 108 Street (212) 222-8800

Park Yorkshire Garage 151 West 108 Street (212) 865-2314

Morningside Garage 3100 Broadway (212) 864-9877

COLUMBIA UNIVERSITY The Morningside Campus & Environs

