

TEACHERSCOLLEGE COLUMBIA UNIVERSITY

2000-2001

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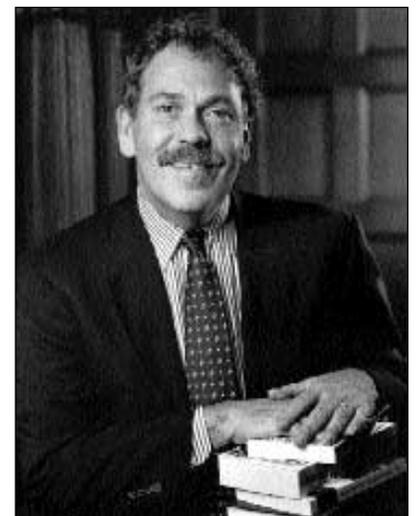
TEACHERSCOLLEGE

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 United States.

Teachers College focuses on education in the broadest sense of the word—in and out of the classroom and across a lifespan. 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



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

TOP RANKED IN U.S. NEWS SURVEY

Teachers College is again in the top rankings in the 2000 U.S. News and World Report survey of schools of education. It is third just points behind Harvard University and Stanford University and well ahead of the remaining 47 schools in the survey. In specialty programs, Teachers College is in the top ten in Administration/Supervision, Social/Philosophical Foundations, Educational Psychology, Elementary Teacher Education, Secondary Teacher Education, and Curriculum/Instruction.

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 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:

- Engaging in research on the central issues facing education.
- Preparing the next generation of leaders of education.
- Educating the current generation of leaders in practice and policy to meet the challenges they face.

- Shaping the public debate and public policy in education.
- Improving 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.



Arthur E. Levine
President, Teachers College



Suniya S. Luthar, Associate Professor of Psychology and Education, conducting a seminar on human development.

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 policy making to ensure that schools are reformed and restructured to welcome learning for all students regardless of their status or station. The other is in



Professor Craig Richards

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 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 curtailed-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 Studies
- 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 con-

temporary 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

Associate Professor James H. Borland



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



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

Education, Arts Administration, Dance and Dance Education, and Music and Music Education. Humanities houses concentrations in History and Education, Philosophy and Education, Religion and Education, and Social Studies. The concentrations in Languages and Literature are Applied Linguistics, 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 Studies
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 Studies includes such programs as Applied Psychology, exploring the physiological effects of exercise and training to improve health and physical fitness; Motor Learning, the development, acquisition, and control of motor skills; 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 leader-

ship 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

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 Center for Infants and Parents, Center for Toddlers and Parents, Hollingworth Center for Study and Education of the Gifted, National Center for Restructuring Education, Schools, and Teaching (NCREST), and the Reading and Writing Project.

[The learning environment at the Center for Toddlers and Parents.](#)



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.



Associate Professor Robert E. Kretschmer

That pursuit finds expression in such programs as Developmental Psychology; Cognitive Studies in Education; Measurement, Evaluation and Statistics; Politics and Education, 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,

OUT FRONT IN ADVANCING NEW EDUCATIONAL IDEAS

“To hold true to our legacy as a pacesetter graduate school of education, Teachers College is asserting a leadership role in establishing the agenda for a public dialogue on education issues. We need to be out front advancing new ideas and approaches to counter the worrisome problems that are undermining our society. No longer is it enough to keep our own counsel; we need to collaborate with business, the media, foundations and government to influence public policy considerations about education. We can say the same for our students, who have become more active on the front lines of education working for change and reform.”

KAREN K. ZUMWALT, Professor of Education on the Evenden Foundation

goods, and services across national 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. Added institutional elements are the Elbenwood Center for the Study of Family as Educator, Institute on Education and the Economy, and Institute of International Studies.

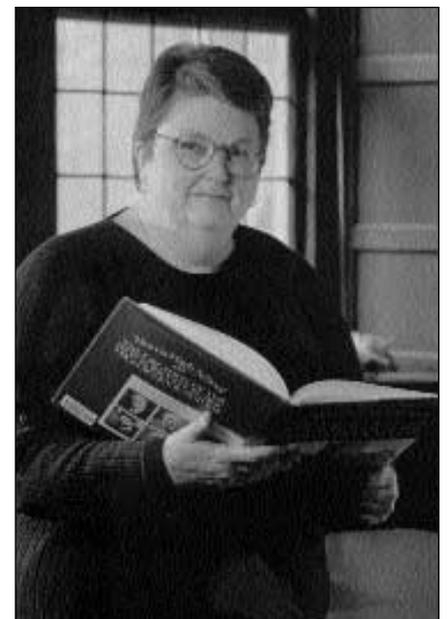
ADVANCES IN FRONTIER THINKING *Department of Mathematics, Science and Technology*

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 (including mathematics), technology (including communication media) and society (including culture) 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 Anthropology and Education and Applied Anthropology (for society and culture); 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 and society. Another venue, the Center for Technology and School Change helps schools plan for change brought about by the technology.



Professor Karen K. Zumwalt



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 business, the media, foundations, labor, government, and education to give priority attention to resolve the issues destined to return confidence, credi-

bility, and distinction to environments wherever learning takes place.

In pursuit of that initiative, the Department of Organization and Leadership incorporates such programs as Educational Administration, Higher and Adult Education, Nurse Executive/Health Administration, 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, Institute of Research and Service in Nursing Education, and International Center for Cooperation and Conflict Resolution.

“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

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, bio-behavioral 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.

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:

IMPROVEMENTS IN READING AND WRITING

Lucy McCormick Calkins, Professor of English Education and founder of the Reading and Writing Project, continues to refine techniques for the



Jay P. Heubert, Associate Professor of Education and Law

teaching of writing and reading that are used in classrooms all over the world. Professor Calkins and her staff currently are involved with teachers from more than 600 schools investigating ways in which teachers can help students use their reading to improve their writing. The approach is to involve favorite authors as co-mentors in the creation of writing that is relevant to the children's lives. In her recent book, *Raising Lifelong Learners*, Professor Calkins points out

that an open and creative approach to conversations, chores, and games is as important as reading, writing, and mathematics.

LEGAL ISSUES IN EDUCATION

Jay P. Heubert is an Associate Professor of Education and Law with an Ed.D. in Administration, Planning and Social Policy from the Harvard Graduate School of Education and a J.D. from Harvard Law School. His research is focused on legal issues in secondary and postsecondary education, equal educational opportunities, educational testing, law and school reform, sexual harassment, and services for immigrants. Professor Heubert brings to these issues experience as a trial attorney in the Civil Rights Division of the U.S. Department of Justice where he litigated federal cases involving educational

Alexa Stott, a teacher at PS 199, works with two students as part of the Reading and Writing Project.



HOW YOUNGSTERS SPEND THEIR TIME

“The Center for Young Children and Families is engaged in a national survey of how youngsters spend their time on an hour by hour basis. We’re interested in specifics—how their days are structured from the time they arise until they retire that include home life, classroom activities, the help they get from parents, and the support parents provide schools. The data we will analyze are based on individual interviews with 3,000 families with children ranging from preschoolers to six graders and detailed diaries maintained by 2,000 teachers. By this process, we can determine the effect of region, income, parental education, behavior patterns and schooling on the lives of children. From that assessment, we can propose policies that best influence the role of schools and families in the educational, psychological, social and cultural development of youngsters.”

JEANNE BROOKS-GUNN, Virginia and Leonard Marx Professor of Child and Parent Development and Education

testing, employment discrimination, special education, and desegregation. His publications include two forthcoming works: “Schools Without Rules? Charter Schools, Federal Disability Law, and the Paradoxes of Deregulation in the *Harvard Civil Rights Liberties Law Review* and *Law and School Reform* published by the Yale University Press.

BLACK-WHITE GAP IN TEST SCORES

Teachers College investigators found that the average American black still scores below 75 percent of American whites on standardized test scores. The gap, according to their study, appears before children enter kindergarten and it persists into adulthood. What causes the gap, noted Jeanne Brooks-Gunn, the Virginia and Leonard Marx Professor of Child and Parent Development and Education, “is not an inevitable fact of nature.” It is, Professor Brooks-Gunn reported, the result of poverty and its impact particularly during the first five years of a child’s life.

Inroads into closing the gap, Professor Brooks-Gunn observed, can be profound by focusing on early childhood programs and family literacy programs to enhance school readiness of poor children. “Over time,” she maintained, “as we equalize—if we do equalize—educational quality so that we don’t have a race difference, we should see the test score gap decline...”

AN EVEN HAND ON SCHOOL CHOICE

Private initiatives in education that include vouchers, charter schools and educational contracting have created a hailstorm of support and opposition with little or no foundation to measure their impact.

Proponents of the movement maintain that private sector competition not only gives parents a better education choice but will force substantive reforms on poor performing public schools. The opposition argues that privatization deprives troubled pub-



Professor Jeanne Brooks-Gunn

lic schools of the students and resources to bring about reform and runs counter to First Amendment prohibitions against state support of religious-based schools.

Organized to rise above the ideological standoff, the National Center for the Study of Privatization in Education at Teachers College serves as a non-partisan voice to sort out the issues and provide an objective perspective on the conflicting concerns

HOW CHILDREN UNDERSTAND MATHEMATICAL CONCEPTS

“We are observing children at work with mathematics and interviewing them in detail about their thinking. We are not interested so much in right and wrong answers as in understanding how children understand concepts of mathematics. A knowledge of their thinking can lead us away from the kind of mathematics instruction that has not worked for so many children—the rote memorization in which children are called upon to get the right answer in the shortest possible time with the least possible amount of thinking.”

HERBERT P. GINSBURG, Jacob H. Schiff Foundations Professor of Psychology and Education

surrounding privatization, according to its director, Henry M. Levin, William Heard Kilpatrick Professor of Economics and Education.

The Center plans to disseminate the results of its research on the World Wide Web, through the media, and with the distribution of broadsheets to interested audiences.

BIG MATH FOR LITTLE KIDS

Believing in the mathematical competence of preschoolers, particularly among low-income, minority children, Herbert P. Ginsburg, Joseph H. Schiff Foundations Professor of Psychology and Education, found in his research that four and five year olds are capable of complex and interesting mathematical thinking. Based on these findings, Professor Ginsburg, together with colleagues at Boston University and Johns Hopkins University, developed teaching materials involving an exciting set of mathematics activities for preschoolers. “We are now working in several day care centers in Manhattan,” Pro-

fessor Ginsburg said, “to design and test these materials, which we are calling “Big Math for Little Kids.”

A DISTANCE LEARNING PARTNERSHIP

In a commentary on technological connections to higher education, Arthur Levine, President of Teachers College, discussed the imperatives for partnership to advance distance learning.

“Distance learning,” President Levine observed, “study away from traditional campuses, is hardly a new idea. What is new today is the vast expansion of new providers and technologies with capacity to reach unimaginable numbers of potential students and the possibility of offering them customized education independent of the clock anywhere in the globe. The chances to serve a diverse clientele and the needs of an increasingly knowledge-based economy have never been better. But, to do so, we need to recognize four dramatic forces driving long-distance learning and the risks they entail for colleges and universities. First, is the pressure to remain at the forefront of



Professor Herbert P. Ginsburg

knowledge, requiring new technologies to power career-long education and the use of continuing education or professional development. Second, a changing demographic picture, focused primarily on working or part-time female students over 25 eager for convenience, service, quality and low cost. Third is cost, turning to technology as a vehicle to reduce the spiraling cost of education. Finally, access to the Internet now available in two out of five American homes. Now, at this moment of enormous opportunity, higher education must determine the ground rules by which a partnership with the technology-based businesses can best be accomplished.”

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

NURTURING YOUNG PEOPLE

A focus on groups and intergroup relations highlights the research, writing, and teaching of Linda Powell, Associate Professor of Psychology and Education. In a study funded by the Carnegie Corporation of New York, Professor Powell is examining the role that adults and schools can play in providing leadership, policies, and structures that foster tolerance, respect, and mutual support among young people. Her most recent book, *Off-White: Essays on Society, Race and Culture*, discusses issues of race from the perspective of understanding whiteness as a race.

EMPOWERING WOMEN WITH MENTAL RETARDATION

Addressing the increasing vulnerability of women with mental retardation to domestic violence and abuse, a collaborative project between the Center for Opportunities and Outcomes at Teachers College and the Association for the Help of Retarded Children is preparing a field-tested curriculum to empower potential victims to become more effective decision-makers.

Funded by the Joseph P. Kennedy, Jr. Foundation, the project is a three-year phased approach involving groups of high-risk participants to identify ways for women to prevent abusive and abusive situations and developing a curriculum that incorporates successful prevention and intervention techniques. The project is being carried out by Linda Hickson, Professor of Education and Director of the Center and Dr. Ishita Khemka, Research Associate at the Center.



Professor Gary Natriello

THE PERILS OF HIGH STAKES TESTING

Gary Natriello, Professor of Sociology and Education, warned in a Community Service Society report that new standards requiring high school students to pass demanding Regents Competency Tests are setting up children for failure. Inner-city and rural schools, starved for funds and shortchanged in teacher competency, are simply unprepared to meet New York State goals, Professor Natriello added. In many communities that forecast has already been realized with 50 to 70 percent of the children failing to meet the new standards.

In a follow-up seminar on the subject, Professor Natriello estimated the initial costs for implementing the new standards at \$3.5 billion or \$5,678 a student. “Ideally,” he noted, “we should have put the resources in place before the standards kicked in” with the dawn of the new millennium. Suggesting ways to improve the use of tests to benefit rather than undermine

THE SOCIETAL POWER OF SPIRITUALITY

I believe children are profoundly spiritual. It is an innate quality. If we can harness that spirituality and integrate it into the daily lives of youngsters, it can help shield them against the perils of substance use and abuse and depression.

We have found in research that adolescents with God-based spirituality are half as likely to use drugs and alcohol than others devoid of deep religious bearings. Schools can play an important role in the development of spirituality without running afoul of constitutional prohibitions on religious practices in public places. Just as we learn of physical laws in the classroom so are there spiritual laws to be considered that relate to transcendental feelings of peace, beauty and artistry. We are now engaged in a study of how to introduce this sense of transcendence into the lives of adolescents from different denominations and even questionable home environments. What we have learned is that these youngsters are eager to share their convictions about values, the sanctity of individuals and spirituality and do so with exquisitely articulated sentiments.

LISA MILLER, Assistant Professor of Psychology and Education

student aspirations, Professor Natriello called for research programs that examine how the consequences and assessment process affect individuals. Another is to explore how the testing and assessment reflect the full range of human capabilities and to look at new way to understand human capacity outside of mainstream tests. Finally, he concluded, those who promote high stakes testing should be accountable for providing a proper analysis as well as the necessary educational opportunities to ensure student success.

COMPARING TEACHER EDUCATIONAL BACKGROUNDS

Karen Zumwalt, Professor of Education on the Evenden Foundation, and Gary Natriello, Professor of Sociology and Education, led a multi-year study comparing teachers with traditional teacher education preparation

and teachers prepared in alternative, often short-term programs. The findings indicate the differences are not as clear-cut as some policy makers considered. Within several years, the study observes, alternative track teachers developed teaching philosophies not that dissimilar from their traditionally prepared colleagues.

HEALTH EDUCATION TO FORESTALL BLINDNESS

Researchers at Teachers College determined that health education programs can play a vital role in reducing the risk of vision loss among African-Americans with diabetes. Charles E. Basch, Professor of Health Education, noted that dilated eye examinations can detect and treat diabetic eye disease early on before serious vision loss sets in. In a study involving 280 participants, 143 in the control group and 137 in the health education group, Professor



Lisa Miller, Assistant Professor of Psychology and Education.

Basch said, “we found that about twice as many people in the education group received timely eye examinations as compared with those who received standard care.” Citing the effectiveness of a health education program, Professor Basch added that “the results are dramatic and clearly demonstrate that health education can substantially increase the rates of dilated eye exams for people with diabetes (the only way to detect diabetic eye disease).” The finding was published in the December, 1999 issue of the *American Journal of Public Health*.



Penny Arnold, Peace Corps Associate

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. Cross-cultural education.

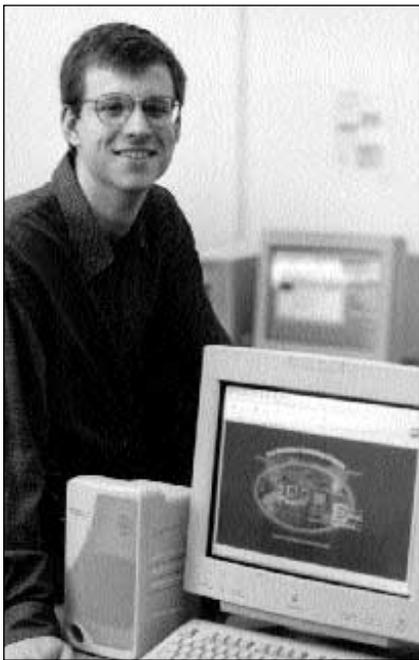
It is against this background of enterprise that students at Teachers College develop the capacity for leadership in pursuing educational interests that parallel the real and abiding concerns of the society at large. And, in the course of their studies, students have the opportunity not only to absorb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

PEACE CORPS ASSOCIATES

Since 1985, more than 300 Peace Corps Fellows have graduated from the program and some 200 current students and fellows are now teaching in New York City public schools. The program offers former volunteers reduced tuition toward a master's degree and a permanent teaching certificate in exchange for a two-year teaching commitment.

In addition, a select group of program graduates become Associates whose role is to assist new fellows, some of whom are coming directly from their Peace Corps services and others who are changing careers. The assistance takes the form of monthly seminars where such issues as certification, conflict resolution and new standards are discussed, sessions to orient new fellows to the Teachers College culture and help in the preparation of newsletters. According to Penny Arnold, one of the Associates, "I and others had a strong influence (on the fellows) because we talked about issues important to new teachers coming into New York City, including school reform, integrating the arts and employing students as leaders."



Kevin Wolff, a doctoral student in Communication and Education, helping to develop technology-based curricula in the public schools.

TECHNOLOGY AND SCHOOL REFORM

The Institute for Learning Technologies, directed by Robert O. McClintock, has initiated a program, called the Eiffel Project, to integrate digital learning into the curriculum of a number of public schools in New York City. In Community School District 6 located in the northern tip of Manhattan, the Institute has helped four schools set up a network for laptop computers made available to students, connect to the Internet and develop a curriculum incorporating digital information. For example, in the Mott Hall School, a science, technology and mathematics magnet school, students learn how to use computers as creative research tools and routinely for course assignments. "Most digital information projects start with technology," Professor McClintock noted. "We start with educational ideas." Use of laptops, he explained, serve to eliminate barriers between schools and parents. Asked to pay half their monthly lease, leading to ownership in three years, the laptops bring computing into the home where parents have access to e-mail and the Internet.

THE PROFESSIONAL DEVELOPMENT SCHOOL

A coalition including Teachers College, Community School District 3 in Manhattan, the Alternative High School Division and the United Fed-



Naomi Hill, Professional Development School Director

eration of Teachers, the Professional Development School (PDS) exposes teachers to the best pedagogic practices in outstanding classrooms. Now in its twelfth year, PDS has ratified its relationship with a charter that sets forth the shared understandings of the partnership to encourage classroom diversity, inquiry and school renewal and reform.

The new charter defines the PDS commitment to support preparation of teachers, ongoing professional development of experienced teachers, inquiry about teaching and refinement of teaching and schooling practices.

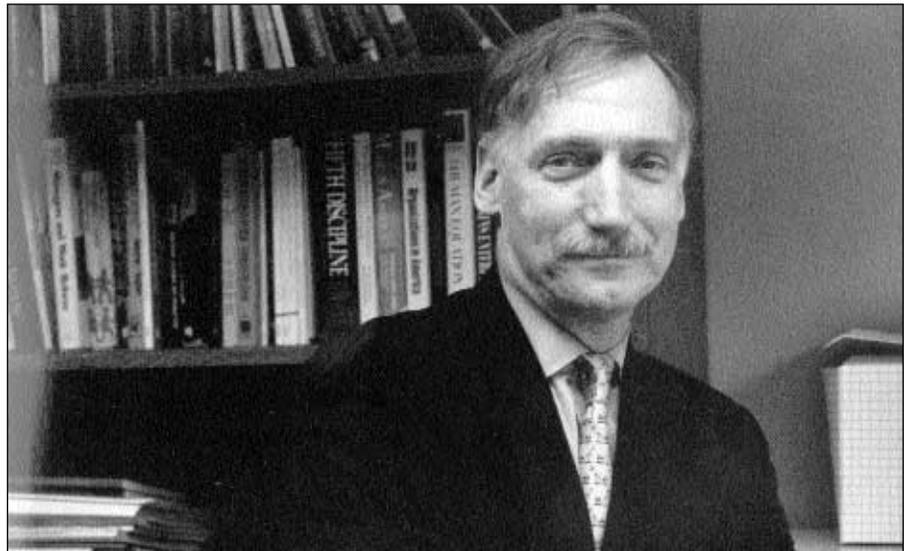
PREPARATION FOR THE CHANGING AMERICAN WORKPLACE

“At the Institute for Education and the Economy, we investigate the ways in which schools prepare students for the changing American workplace. How can our educational institutions—including high schools and community colleges—best prepare our citizens for the continuously changing atmosphere that will face them as workers in the 21st Century? This is a question that is paramount in the minds of policymakers, employers and educators. It is also the focus of our research, as we study some of the best links between the school and the workplace and disseminate news about the most productive programs to a wide audience.”

THOMAS R. BAILEY, Professor of Economics and Education
and Director, Institute for Education and the Economy

EDUCATION AND THE ECONOMY

Teachers College students have a direct role in developing educational reforms to meet the changing dynamics of the workplace. Working under the auspices of the Institute for Education and the Economy, graduate students are addressing such issues as on-the-job learning, school-to-work programs, and skill requirements. The Institute, directed by Thomas R. Bailey, Professor of Economics and Education in the Department of International and Transcultural Studies, also houses the Community College Research Center and funds fellowships for doctoral students to examine the role of community colleges in workforce and economic development. With workforce opportunities concentrated in service and scientific areas, where qualified applicants are in short supply, the role of education is crucial in meeting the demand for professionals with a strong background in independent thinking and skills training.



Professor Thomas R. Bailey

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.”

A WIDE-ANGLE LOOK AT COMMUNITY COLLEGES

The opportunity to intensify research interests beyond doctoral degrees is made possible at Teachers College with its Minority Postdoctoral Fellows Program. Selected for a year in residence, the current Fellow is Stan Goto, Ph.D. in Education from the University of California at Berkeley, whose research is in the mission of community colleges.

According to Stan Goto, “a remedial English class in freshman composition at a community college is an arena where all sorts of tensions are played out. In one sense, its role is to bring unprepared students up to acceptable standards. At the same time, the classes are gatekeepers that open the doors to four-year colleges only to those who successfully complete the course. That is the dilemma, to welcome one and all and then hold them to standards that many



Stan Goto, Minority Postdoctoral Fellow

may never meet. Beyond the academic mission of community colleges, we need more emphasis on its other strengths such as vocational and technical education, lifelong learning, community service and contractual arrangements that provide options for students with different abilities to achieve.

“With that as background, I am moving from pedagogy to policy to discover how educators are responding to this post-remedial terrain and, even with tightened admission standards, to identify the strategies to employ to prepare underachieving students with the motivation and discipline to succeed.”

WIDE-RANGING RESEARCH INITIATIVES

With a \$1 million grant from the Spencer Foundation, doctoral students at Teachers College selected as Spencer Fellows have full financial support to carry out research on educational issues. Outstanding minority students from universities across the country selected as Holmes Scholars have the opportunity to engage in research based on a theme selected by Teachers College with their investigative findings presented at a national education conference.

Funded by a 1999-2000 Fulbright Full Grant, Carolyn Kissane traveled to the former Soviet republic of Kazakhstan to study how instruction and pedagogical practice are chang-

ing inside out in this newly emerging country. A doctoral candidate in the Comparative and International Education Program, Ms. Kissane noted that “like a tree uprooted, teachers in Kazakhstan have been asked to disregard the way things were done in the past and embrace reforms they do not fully understand or feel are necessarily needed in the area of education. As a result of this investigation,” she added, “it will be possible to see how and in what ways teachers have adopted modified or opposed elements of top-down post-socialist educational policies and what has been their imprint in this period of transition. This research can reveal why gaps exist between policy talk, policy action and implementation of pedagogical practice in the classroom.”

Gita Steiner-Khamsi, Associate Professor of Education, is working on a bottom-up school reform initiative in Mongolia in cooperation with the Mongolian Foundation for Open Society, an autonomous non-profit organization funded by the Soros Foundation. “What makes this project special,” observed Professor Steiner-Khamsi, “is that it is assisting the Ministry of Enlightenment, Mongolia’s Department of Education, in its efforts at school reform in secondary schools in every corner of the country. Based on criteria important to the Soros Foundation,

PREPARING TEACHERS FOR READING ASSIGNMENTS

“As a Rose Fellow, I interned at the Reading Reform Foundation whose mission is to train urban schools teachers and students in undergraduate education programs to provide exciting approaches in how reading is taught. I have observed kindergarten and first-grade classrooms, watching how reading instruction takes place to evaluate the effectiveness of various methodologies. I plan to incorporate my impressions and insights from this on-site experience in my master’s project on how best to prepare teachers for reading assignments in the public schools.”

CHRISTINE WERTHMANN, candidate for Ed.M. in Reading and Learning Disabilities

the objectives include bottom-up reform, increased participation of parents and teachers in schooling and outreach to rural communities beyond the capital city.”

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.

MODELS FOR CHANGE

One avenue taken by Teachers College enroute to transforming education is to create coalitions with schools and districts. Clearly demonstrating the links between theory and practice, Teachers College students help invigorate experienced New York City teachers with fresh points of view and novel approaches to resolve nagging problems.

Teachers College International Center for Cooperation and Conflict Resolution, with participation by students, has worked with many high schools in New York City to train teachers and counselors to mediate student disputes. Faculty members in Teachers College art, dance, and music education programs, together with their graduate students, support the interdisciplinary Creative Arts Labo-



Christine Werthmann, Ed.M. candidate.

ratory, a federally funded program to integrate arts education into the core curricula at elementary and middle schools in New York City.

Judith Burton, Professor of Art Education, and departmental students have played a leading role in designing the curriculum for the Heritage School, a secondary school seeking to integrate the arts into a traditional curriculum. Professor Burton notes that teachers in the school are trying

innovative approaches in learning, such as using the museum collections in New York City as a resource for lessons in arts, history, and the humanities.

THE KLINGENSTEIN CENTER

Selected on the basis of a national competition to identify leadership potential among independent school teachers, Klingenstein Fellows receive full tuition and living stipends to spend an entire academic year in residence at Teachers College and other graduate schools of Columbia University.

As Fellows, students pursue individual research projects and meet in intensive seminars designed to increase their knowledge of current issues confronting both public and private schools in the United States. In an evaluation of the 1,200 participants in the program since 1977, an astounding 96 percent ranked the experience as outstanding, serving as the foundation for realizing leadership roles as teachers and administrators in independent schools.

IN THE FLOW

Music has a special power as a natural form of communication for children. Working with pre-schoolers from 16 months to five years of age, Lori Custodero, Assistant Professor of Music Education, observed, “we tell

stories in chants and phrases to encourage them to react independently with their own creative responses.

For example, after singing a touch your toes song, a year and a half year old touched her toes to communicate what the song was about. Or a five year old, enchanted by a rhythmic activity, grabs the hand of a nearby friend and creates her own dance. These are examples of self assignment, taking the initiative and rising to a challenge. Thinking and doing become one in flow.”

Studies show that people in flow feel highly challenged and highly capable. What Professor Custodero wit-

nessed in pre-schoolers in music classes were musical activities that provided the children with multiple vantage points for goal perception and achievement and opportunities for clear and immediate feedback.

The music making they engaged in—singing, moving and playing instruments, merged action and awareness under the individual control of the children. To test the validity of these methods, she developed a coding scheme based on observations and earlier research. The most important point is the acknowledgment that children are agents in their own learning, doing very creative things to keep themselves challenged.

A youngster in flow with Professor Lori Custodero.



AN OPEN AND FORCEFUL DISCUSSION OF EDUCATION

“Journalists covering public education have become more probing and persistent than their less confrontational style in the recent past. As a result, educators have grown wary in their relations with the media. The Hechinger Institute conducts seminars for journalists on how to better understand the educational policies and practices that they cover. In an academic forum absent deadline pressures and editorial direction, members of the media can ventilate their frustrations and concerns in covering education at a time when problems seems to overwhelm process. In turn, education officials can provide the press with insights into the vexing and troublesome issues confronting public education against a background of social, political, and economic constraints. And, to discuss with equal candor the initiatives developed and taken by educational systems to both remedy and enhance environments for learning. Our goal is to remove misunderstanding as a barrier to an open and forceful discussion of education news and education coverage.”

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

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.

CENTER FOR EDUCATIONAL OUTREACH AND INNOVATION

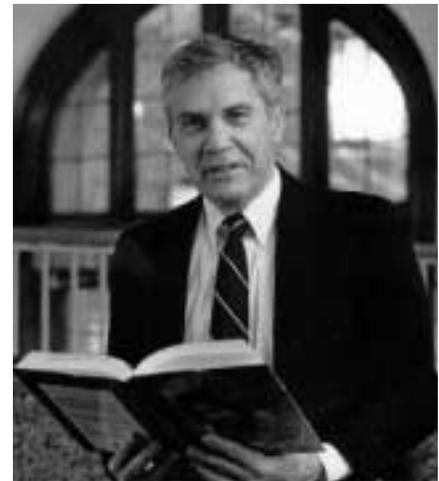
A central player in establishing forums where the competition for good ideas flourish, the Center for Educational Outreach and Innovation (CEO&I) is engaged in a number of creative initiatives in distance learning, including Web-based certificate programs; leadership programs; public lectures; symposia, and debates.

CEO&I offer Web-based certificate programs in “Designing Interactive Multimedia Instruction” and “Teaching and Learning with Technology”

to underscore the “creative and pedagogically sound ways to integrate current and emerging technologies into education.

The Center also is instrumental in elevating dialogue on educational issues with the Jill and Ken Iscol Lecture Series on children, equity and learning with Hillary Rodham Clinton giving the inaugural address; Great Speakers Series that attract such experts as Stephen Jay Gould and Henry Louis Gates; TC BookTalk that features authors recently published by the TC Press, and moderated by Richard Heffner of WNET’s The Open Mind.

In partnership with the Institute of International Education, CEO&I offers a course called the “Federal Policy Institute,” taught by P. Michael Timpane, former president of Teachers College. In a week-long residence in Washington, students explore a policy issue of personal interest with senior policy makers,



Gene I. Maeroff

including high ranking federal officials and representatives from education circles, teacher unions, school boards and businesses.

HECHINGER INSTITUTE ON EDUCATION AND THE MEDIA

Named in memory of Fred M. Hechinger, education editor of *The New York Times* and a Teachers College trustee, the Institute works to improve press coverage of education by helping journalists understand the complexities of educational policy and

CONCERNS FOR JUSTICE AND WISDOM

“We keep asking: How can we get kids to learn more? How can we get all students to meet new, high academic standards? Those aren’t bad questions, but they don’t go far enough. I think we should be asking: How can we raise and educate our children better? When you ask that question, you think of all the ways we want our children to grow, morally and emotionally, as well as mentally. Historically, schools have concerned themselves with making kids good as well as making them smart. I think we have to get back to some of that. Most families want their children to be competent, wise and just. The current reform movement in education emphasizes competence. I favor competence, not incompetence, but I think we ought also to be concerned about instilling a sense of justice and a measure of wisdom in the kids we teach.”

THOMAS SOBOL, Christian A. Johnson Professor of Outstanding Educational Practice

school leaders understand the information interests and deadline pressures of journalists. In one of its continuing initiatives to discuss the latest trends and issues in education, the Institute journeyed to San Francisco for a seminar on “Costs, Access and Politics of Higher Education,” held in partnership with The National Center for Public Policy and Higher Education.

According to Gene Maeroff, director of the Institute, the comments of panelists focused on such topics as the fear that affordability has influenced too many people to enter higher education unprepared; the failure of the public to know what it takes to pay for a college education even though it recognizes its importance; the lack of political clout of higher education that makes it an easy target for lawmakers; the need for colleges and universities to raise their own productivity to compete, and the gap between what employers want and what higher education produces.

PREPARATION FOR SCHOOL LEADERSHIP

The dearth of qualified candidates to fill a growing number of vacancies in school principalships prompted the formation of the Future School Administrators Academy to increase the size and quality of the leadership pool for the Putnam/Northern Westchester school districts.

Organized by Teachers College and Putnam/Northern Westchester Board of Cooperative Educational Services, the Academy offers teachers the opportunity to obtain New York state certification as a school district administrator in a two-year, part-time program. Thomas Sobol, Christian A. Johnson Professor of Outstanding Education Practice at Teachers College, and Renee Gargano, Deputy Superintendent of the Putnam/Northern Westchester BOCES, co-direct the Academy.

According to Professor Sobol, “a number of factors have come together



Professor Thomas Sobol leading a seminar on public school reform issues.

to make it more difficult to recruit and retain school district administrators. These include higher salaries for teachers, increased accountability, longer hours, a longer year and high stakes testing, where one flagging performance by a school’s students can cost a principal a job and early retirement.”

To overcome these obstacles and develop greater leadership potential, the Academy’s goals for its participants are to: develop an ability to lead and manage schools as purposeful, effective, humane organizations;

provide the theoretical and management practical skills to lead in an increasingly diverse and technological society; broaden and deepen understanding of values, trends and issues that affect schools, and instill a culture of reflective practice, acquiring and maintaining the habit of continuous learning and mutual support.

Providing a blend of theory and practice, the Academy serves teachers in their home districts while, Professor Sobol noted, vigorously “identifying people who are capable teachers who also have a strong aptitude and interest for the principalship.”

INFLUENCE OF FOR-PROFIT EDUCATIONAL ENTERPRISES

A stellar group of business-oriented educators and venture capitalists were convened by Teachers College’s Institute on Education and Govern-

ment to discuss the growing influence of for-profit educational enterprises.

“Eight years ago, there were no publicly traded education firms,” explained Joshua Lewis, Managing Director of E.M. Warburg Pincus, the world’s largest venture equity firm. “Today \$20 billion is in the market. To go from zero to \$20 billion in seven years is remarkable. Wall Street,” he added, “has woken up to the fact that education can be a good business. It’s a shadow business but it is growing.”

Examples of for-profit enterprises in education are Advantage Learning System which specializes in software applications, Sylvan Learning Systems which contracts with schools to serve students with learning difficul-

ties and the Edison Project which contracts with school systems to actually run public schools.

Michael Moe, Director of Global Growth Stock Research for Merrill Lynch bemoaned that students come out of our schools unable to read and write. “(For profits) are saying that they can produce better outcomes for the same money.”

Benno Schmidt, Jr., Chairman of the Board of the Edison Project, added that the most difficult obstacle for educationally-oriented business to overcome is the perception that “profit and education just don’t mix. We can only make a convincing case if what we offer is of much higher quality.”

The Institute on Education and Government disseminates information on education and the impact of public policy to lawmakers and business executives.

LECTURE SERIES ON CRITICAL ISSUES IN EDUCATION

The on-going dialogue at Teachers College is enlivened by those who come to speak at regular campus lectures, including the annual Virginia and Leonard Marx Lecture, Julius and Rosa Sachs Lecture Series, and Great Speakers Series. When superintendents, legislators,



Donna E. Shalala, United States Secretary of Health and Human Services

professors, and business leaders gather to exchange views, sparks sometimes fly, but these exchanges almost always are provocative and productive. Teachers College students regularly listen in on these exchanges and are encouraged to ask questions and offer comments.

The Marx Lecture

Donna E. Shalala, United States Secretary of Health and Human Services, launched the fifth annual Virginia and Leonard Marx Lecture, challenging the school reform movement to commit itself to three principles. “The first,” she said, “is early childhood development— making sure that kids have the health and skills they need to learn before they start kindergarten.” Secondly, Secretary Shalala added, it is equally important to safeguard children’s health after they start school. The third principle is community involvement. “Schools and their partners in the community must play a proactive role in preparing young people to lead healthy, productive lives,” she noted. Formerly a Teachers College professor, president of Hunter College and chancellor of University of Wisconsin at Madison, Secretary Shalala, maintained that problems associated with school-age children are lessening because of grassroots partnership between schools and communities. “Out-of-



Frank Newman

wedlock birth rates are down. We’re even making headway in the fight against teen drug abuse and tobacco use.” What is critical in ensuring a school’s success, she contended, is “making sure that every child is ready to learn.”

The Sachs Lectures

Frank Newman, admired by President Arthur Levine as “one of the most creative and distinguished minds in the field of education in this country,” focused on the need to connect higher education with the interests and expectations of our society in the three Julius and Rosa Sachs Lectures he delivered at Teachers College. In the lectures, Dr. Newman discussed “Intellectual Skills in the Information Age,” “Rebuilding the Vision of Toqueville,” and “Higher Education and Social Mobility.”

On the subject of intellectual skills, he said the nation’s ascendancy as a technological leader could be in jeopardy if America’s “human capital” is not sufficiently educated to sustain continuing leadership. “Simply put, the issue is, can we out-think the rest of the world?” Dr. Newman asked. Arguing that technological changes require new thought processes, he said higher education must rethink its mission because college and university programs are failing to equip students to meet the demands of the marketplace. If educators don’t take charge and reinvent the universities themselves, he cautioned, “crucial attributes of higher education could be damaged or lost.”

In his second lecture, Dr. Newman stressed the need to enhance civic skills, an emphasis he felt “may even be more important than a focus on workplace skills.” What is alarming, he observed, is the lack of interest in voting and in political and policy issues. To fuel greater participation in civic endeavors, universities need to become more visible and active as centers where issues can be discussed freely and objectively.

In his concluding lecture on social mobility, Dr. Newman identified higher education as the catalyst to provide the least well-off a realistic chance to rise into the middle class. “All Americans see themselves as

middle class, from postal workers to the President,” he added. “Why not have a society with no underclass?” Dr. Newman remarked that the nation is “in one of the longest booms and we are wasting it.” With economic prosperity, the nation has the opportunity to do something good with it, he said, adding: “We’re on the rise, let’s go.” He wants higher education to use programs that work on a larger scale to help promote social mobility and solve some of society urgent problems. “Change is coming,” he said, and higher education needs “to be the architects of change.”

Widely known for the “Newman Reports” (*Report on Higher Education, 1971* and *National Policy and Higher Education*), Dr. Newman was former president of the Education Commission of the States.

Iscol Lecture Series

Hillary Rodham Clinton inaugurated the Jill and Ken Iscol Lecture Series with the conviction that “all students can learn. No exceptions. No excuses.” It is a “revolutionary and profoundly American statement,” the First Lady exclaimed, because by making the commitment to that simple value— that all children can learn— the nation is already taking a big step toward improving the justice and possibility of public education for everyone.



Hillary Rodham Clinton

Echoing that theme in her remarks— “Reimagining Education: A Matter of Justice and Possibility,” Mrs. Clinton emphasized the need “to think clearly about justice and possibility in light of what we know about teaching and learning, to apply research and intuition, to reach out across the lines that too often divide us. And, in the process, begin to translate into

reality the vision of an educational system that would truly serve all of our children.

In addressing the members of the Teachers College community, she said that “you have worked very hard to make sure that the promise of education within these ivy covered walls doesn’t just stay inside— safe from any challenge. But instead, walks out into the bright sunlight, into every street corner, into every school to bring the message of change, of justice, of possibility.

Mrs. Clinton stressed the importance of the public education system and how a large part of the success of the United States can be attributed to it because of how the country has welcomed people from all cultures, races and religions into society and the belief we all share for a common institution.



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:

Researchers from the **National Center for Restructuring Education, Schools and Teaching (NCREST)**, directed by Professor Gary Griffin, travel throughout the nation, studying ways in which teachers, administrators and parents are working to reform schools and educational practice. The researchers



Professor Lucy McCormick Calkins

then report on what does and does not work in school reform and make those reports available to other school leaders around the world. Recently, NCREST studied the work of four schools in New York City and one in New Castle County, Delaware involved in creating new ways to assess a student's progress. The work, co-authored by Linda Darling-Hammond, Jacqueline Ancess and Beverly Falk, was described in *Authentic Assessment in Action*, published by Teachers College Press.

The Teachers College Reading and Writing Project is an internationally renowned coalition of teachers, teacher-educators

and writers. For almost two decades, the Project has helped teachers in hundreds of schools establish writing and reading workshops in which children pursue projects they care about and in which teachers act as coaches and mentors. The mentorship component has been augmented to connect reading specialists and support personnel from Teachers College with classrooms in five schools to improve the reading abilities of students in grades K to 8. The mentor schools also serve as test sites to measure teacher development, watching for progress and alert to regression.

Researchers from the **Institute on Education and the Economy** are also traveling the nation, taking close-up looks at school programs that ease the transition from school to work. Led by Thomas Bailey, Professor of Economics and Education, the Institute's researchers (most of them Teachers College students) are working to discover what these programs have in common so that they can share those commonalities of success with other

SHARED RESPONSIBILITY FOR EDUCATING CHILDREN

“There was a time when parents and teachers shared a covenant and a responsibility for the well-being and education of children. But over the years families and schools have come to mistrust and blame each other for all kinds of student failure. With the movement to establish small community schools, we can hope that this covenant will be restored. But we cannot just depend on intimacy alone. Each day we learn more about how students learn and develop better, and we need to help parents and school staff individually and together seize the opportunity to use this knowledge.”

ERWIN FLAXMAN, Director, Institute for Urban and Minority Education

school leaders. Part of the Institute on Education and the Economy is the **Community College Research Center (CCRC)**, established by a grant from the Alfred P. Sloan Foundation, which will link administrators from community colleges with researchers who deal with issues regarding the promise of these important American institutions. CCRC will also work to foster more research about community colleges, institutions that too often have been overlooked. It is one example of how the College is building on its past greatness. For example, in the 1960s and 1970s, another Teachers College Center on Community Colleges prepared hundreds of administrators for those institutions; the College will use its relationship with its alumni, who lead community college systems from New York to California, in creating this new center for research.

Under the direction of Jeanne Brooks-Gunn, Virginia and Leonard Marx Professor of Child and Parent Development and Education, **The Center for Young Children and Families** conducts a wide range of interdisciplinary studies

and provides training for those who will make policy involving children and families. The Adolescent Study Program is now involved in a major four-year project measuring the social and emotional development of girls. More than 200 families are involved in the research project, which will lead to a greater understanding of parenting behaviors, racial and ethnic socialization, identity development, school achievement and other aspects of growing up female.

The **Institute for Urban and Minority Education (IUME)**, is sharing a \$400,000 grant with the University of Colorado from the Metropolitan Life Foundation to help address problems of youth violence. Under the grant, IUME is creating models of anti-violence programs drawn from successful results of community- and school-based initiatives for national distribution. According to Erwin Flaxman, IUME director, the metropolitan grant makes it possible to transform research findings into policy decisions and anti-violence programs.



Erwin Flaxman

The International Center for Cooperation and Conflict Resolution has lessened conflict in New York City's high schools by training administrators, faculty members and students in techniques of conflict resolution. Today, in almost every high school in the city, students are teaching other students to resolve disputes before they turn into dangerous altercations. According to Peter T. Coleman, Director of the Center and Research Assistant Professor, “students in the program initially study the fundamentals of conflict resolution. Then, they engage in several practicums in laboratory settings before being involved in internships. For example, some work at the Bronx-based Institute for Mediation and Conflict Resolution where they handle

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, Professor of History and Education and Director, Institute for Learning Technologies

cases referred from the Bronx County Court and the police. Adults in the schools have become more knowledgeable about methods they can use to resolve conflicts between students.” Morton Deutsch, Edward Lee Thorndike Professor Emeritus of Psychology and Education, is the founder of the Center and one of the world’s most respected scholars of conflict resolution.

The Institute for Learning Technologies (ILT), directed by Robert O. McClintock, 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 technologically with “friends” at other schools around the nation to share ideas about school projects and other areas of



Professor Robert O. McClintock

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 Leta Hollingworth Center for the Study and Education of the Gifted provides support services for schools and organizations that are concerned with the special needs of gifted and talented youngsters. The Center continues the work of Project Synergy with preschool children in public daycare centers in Central Harlem. Most of the Synergy work, which identifies and supports gifted youngsters from disadvantaged backgrounds and their families, is co-directed by

James Borland, Associate Professor of Education and Chair of the Department of Curriculum and Teaching, and Lisa R. Wright, Director of the Hollingworth Center and Adjunct Assistant Professor of Education.

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.

THE ADJUNCT FACULTY ROLE

Teachers College's adjunct faculty members play a significant role in bringing the reality of practice into our classrooms and seminars. Examples illustrate their involvement. James J. Shields, former Chair of the Department of Social and Psychological Functions and Director of the School Administration Program at City College, City University of New York, presented a course in "International Planning in International Educational Development." As a Teachers College visiting professor, he is Director of Sasakawa Young Leaders Fellowships Fund providing professional development workshops under the auspices of the Center for Educational Outreach & Innovation.

Robert E. Fullilove, Associate Dean for Minority Affairs at the Columbia University School of Public Health and a leading researcher on AIDS education, regularly teaches a course on community approaches to prevent HIV infec-

tions. A graduate of Teachers College, Dr. Fullilove discusses his own experiences as he works to disseminate information about the disease in minority communities in New York City.

Howard Gruber, Adjunct Professor of Psychology and Education, teaches a course on the "Development of Creativity" at Teachers College. Based on his book *Creative People at Work*, Professor Gruber is interested in exploring how the creative work of individuals develops and how it relates to the work of others. Professor Gruber's 1974 case study of *Darwin on Man: A Psychological Study of Scientific Creativity* was cited in the November-December, 1999 issue of *American Scientist* as one of the most important science books of the century. His focus on the thinking process that underlies creative writing has been a recurring theme in his subsequent publications and teaching.

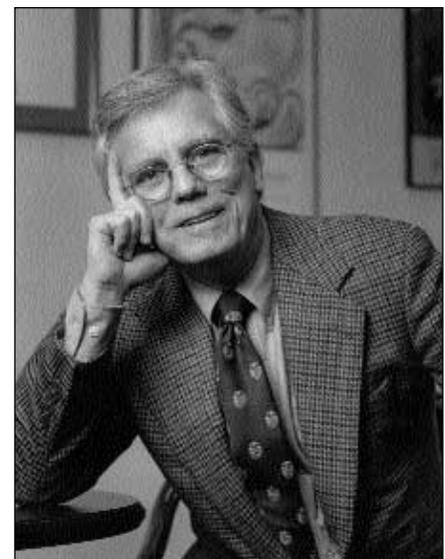
Nanette A. Kramer, one of the leading experts on the psychological problems of the aging population, is an adjunct associate professor of psychology and education. She has received grants totaling some \$500,000 to evaluate techniques for helping the elderly, including patients with severe dementia. Teachers College students work with her on these evaluations, learning about psychological interventions in the real world of nursing homes and other residencies for older people.

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.

James J. Shields





Neff Fellow Carolyn Choi works with students at PS 6.

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

Angel 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-a-kind 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.



Relaxing moments in the extensively renovated Everett Lounge where Teachers College students and faculty can meet informally for discussion and study sessions.



Academic and Educational Services

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AUTUMN TERM 2000 (September 6 - December 22)

Calendar Notes:

- Autumn Semester Only: Saturday courses meeting weekly are scheduled for only 14 weeks in the regular Autumn semester. 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.

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| September | 1 | Friday. Last day to file, in the Registrar's Office, Master's essays for October 18 degree award. |
| | 2 | Saturday. Beginning of occupancy in Teachers College residence halls for new students attending the Autumn Term. |
| | 4 | Monday. Labor Day. University Holiday. |
| | 5 | Tuesday. In-person registration for Autumn Term. New international students report to the Student Life Center. Hours: 10 a.m. to 8 p.m. Orientation Program, Horace Mann auditorium 8:30 a.m. - 5:00 p.m. |
| | 6 | Wednesday. Classes begin. Autumn Term 2000. |
| | 6-8 | Wednesday-Friday. Registration and add/drop period. Hours: 9:30 a.m. to 6:00 p.m. Wednesday and Thursday; 9:30 a.m. - 5:00 p.m. Friday. Advisors and/or their representatives available from 3 to 5 p.m. |
| | 8 | 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 2000. |
| | 8 | Friday. Last day to file application for Doctoral Certification Examination (Ed.D./Ph.D.) to be given October 20. |
| | 19 | Tuesday. Last day to add and drop courses for the Autumn 2000 term, file a Certificate of Equivalency, and enroll in Student Health Service and Student Medical Insurance programs. |
| | 20 | Wednesday. Requests for late registration on or after this date require Registrar's approval and payment of \$100 late registration fee. |
| | 25 | Monday. Last day to deposit Ed.D. dissertation and abstracts, which have been corrected in accordance with Dissertation Secretary's evaluation, and pay microfilm fee for October 18 award of degree. |

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| October | 3 | Tuesday. Last day to change points in variable point courses. |
| | 13 | Friday. Last day to deposit Ph.D. dissertation with the Office of Doctoral Studies and the Graduate School of Arts and Sciences for the award of the October degree. |
| | 18 | Wednesday. Award of October degrees and certificates. No ceremony. |
| | 19 | Thursday. Midterm date, Autumn Term 2000. |
| | 20 | Friday. Doctoral Certification Examination (Ed.D./Ph.D.), 9 a.m. to 12 noon and 1:45 to 4:45 p.m. |
| | 31 | Tuesday. Last day to file or to renew an application, in the Registrar's Office, for Master's degrees and certificates to be awarded in February. (After this date, application may be filed only until November 14 upon payment of \$15 late fee.) |
| November | 1 | Wednesday. Priority deadline for submission of financial aid applications for scholarship and need-based aid for enrollment periods beginning with the Spring Term 2001. See Student Aid for further details. |
| | 1-22 | Wednesday-Wednesday. All loan recipients who will complete degree requirements during Autumn Term 2000 must schedule a loan exit interview with the Office of Student Aid. |
| | 22 | Wednesday. No Classes. Offices open. |
| | 23-26 | Thursday-Sunday. Thanksgiving Holidays. |
| December | 1 | Friday. Financial aid applications for 2001-2002 become available in the Office of Student Aid. |
| | 4 | Monday. Last day to file, in Registrar's Office, Master's degree essays for February degree award. |
| | 4 | Monday. Registration for the Spring term for continuing students via web and touch-tone registration begins. |
| | 22 | Friday. Autumn Term 2000 ends. |
| | 23 | Saturday. Termination of occupancy in Teachers College residence halls for Autumn Term students not returning for Spring Term 2001. |

SPRING TERM 2001 (January 17–May 6)

| | | | | | |
|----------|----|--|-------|-------|---|
| January | 13 | Saturday. Beginning of occupancy in the Teachers College residence halls for the Spring Term. | | | Graduate School of Arts and Sciences for the award of the February degree. |
| | 15 | Monday. Martin Luther King, Jr. Day Observed. University Holiday. | | 13 | Tuesday. Last day to change points in variable-point courses. |
| | 16 | Tuesday. Registration for Spring Term 2001. New international students report to the Student Life Center. Hours: 10:00 a.m. to 8:00 p.m. | | 14 | Wednesday. Award of February degrees and certificates. No ceremony. |
| | 17 | Wednesday. Classes begin. Spring Term 2001. | | 16 | Friday. Doctoral Certification Examination (Ed.D./Ph.D.), 9:00 a.m. to 12 noon and 1:45 to 4:45 p.m. |
| 17-19 | | Wednesday-Friday. Late registration and change period. Hours: Tuesday - Thursday 9:30 a.m. to 6:00 p.m.; Friday 9:30 a.m. to 5:00p.m. Advisors available from 3:00 to 5:00 p.m. | | 16 | 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 2001. |
| | 19 | Friday. Last day to file notification in Office of Doctoral Studies of intention to defend Ph.D. and Ed.D. dissertation during Spring Term 2001. | March | 1 | Thursday. Last day to file Master's essays for May degrees. |
| | 19 | Friday. Last day to file application for Doctoral Certification Examination (Ed.D./Ph.D.) to be given February 16. | | 8 | Thursday. Midterm date, Spring Term 2002. |
| | 30 | Tuesday. Last day to add and drop courses for Spring Term 2001, file a Certificate of Equivalency, and enroll in Student Health Service and Student Medical Insurance plans. | | 11-18 | Sunday-Sunday. Spring Holidays. |
| | 31 | Wednesday. Last day to file or to renew an application, in Registrar's Office, for Master's degrees and certificates to be awarded in May. (After this date, application may be filed only until February 14 upon payment of \$15 late fee.) | April | 2-30 | Monday-Monday. All bank loan recipients who will complete degree requirements during the Spring Term 2001 must schedule loan exit interview with the Student Aid Office. |
| | 31 | Wednesday. Requests for late registration on or after this date require registrar's approval and payment of \$100 late registration fee. | | 16 | Monday. Registration for the Summer Term for continuing students via web and touch-tone registration begins. |
| February | 1 | Thursday. Priority deadline for submission of 2001-2002 financial aid application for scholarship and need-based aid in the Student Aid Office and for submission of the 2001-2002 admission application to the Admission Office. | | 27 | Friday. Last day to deposit Ed.D. dissertation and abstracts, which have been corrected in accordance with Dissertation Secretary's evaluation, and pay microfilm fee for May 16 award of degree. |
| | 2 | Friday. Last day to deposit Ed.D. dissertation and abstracts, which have been corrected in accordance with Dissertation Secretary's evaluation, and to pay microfilm fee for February 14 award of degree. | May | 8 | Tuesday. End of Spring Term 2001. |
| | 9 | Friday. Last day to deposit Ph.D. dissertation with the Office of Doctoral Studies and the | | 9 | Wednesday. Termination of occupancy in Teachers College residence halls for Spring Term 2001 for students not remaining for Summer Session A. Extensions granted for students remaining for Commencement. |
| | | | | 11 | Friday. Last day to deposit Ph.D. dissertation with the Office of Doctoral Studies and the Graduate School of Arts and Sciences for the award of the May degree |
| | | | | 15 | Tuesday. Teachers College Master's degrees Convocation, 4:00 p.m. |
| | | | | 16 | Wednesday. Conferring of degrees, 10:30 a.m.; Teachers College Doctoral degrees Convocation, 2:30 p.m. |



NUTRITION AND PUBLIC HEALTH

The nutrition program at Teachers College is in a dynamic environment with links to regional and national research and practice sources in nutrition. The opportunity to build on these connections to conduct innovative research in nutritional epidemiology and alternative health practices is relatively untapped but nonetheless unparalleled. Indeed, it represents a logical extension of my research that has shown that dietary fiber and whole grain intakes decrease the risk of heart disease and dairy and egg consumption may increase the risk of ovarian cancer. I am interested in translating these research findings into dietary guidelines and public policy.

LAWRENCE H. KUSHI, Sc.D., Ella McCollum Vahlteich Professor of Human Nutrition

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 award-winning 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 artistic-aesthetic 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) 678-3459.

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



Professor Lawrence H. Kushi

to improve health and prevent premature death and disability throughout the human life span through schools, patient care, workplace, and other community-based 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.

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

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, governmental agencies such as the National Institutes of Health and Centers for Disease Control and Prevention, and other research groups. 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 that has been organized by the World Health Organization European Regional Office; and the Salzburg Seminar Special Session on Critical Issues in Global Health: Leadership Challenges in the 21st Century, which will be convened July 8–11, 2000, in Salzburg, Austria.

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 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:



Professor Linda Hickson

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.

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

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 Emerita 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 lettres 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 problem-solving in areas that are meaningful to



Associate Professor Debra A. Noumair

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:
<http://www.tc.columbia.edu/~academic/ctsc>.

The Center for Young Children and Families conducts interdisciplinary and policy relevant research on the education and development of children and families, provides training for young scholars and policy analysts to take leadership roles in national and state policy-making activities which focus on children and families, and houses several archival data sets. The Center examines the health and developmental well-being of children

and families, combining both biological and environmental perspectives. The Center addresses these perspectives within a framework which links research, policy, practice and training.

The Center's research mission promotes theory construction, a better understanding of child and family well-being, and empirically tests the efficacy of child and family interventions. The policy product of the Center's research is guidance relating to public decisions made regarding the well-being of children and their families. The Center's policy function informs public decision and policy-making through theoretical and empirical examination of intervention programs and policy initiatives.

The Center has developed the following training components:

- Center Assistantships, open to students enrolled in master's programs, allow students to become acquainted with the practice and policy initiatives of the Center.
- Center Fellowships, open to doctoral students, foster in-depth training in the nexus of policy, practice and research by working on specific Center projects related to children and families.
- Senior Fellowships, for post-doctoral training, are responsible for managing specific projects, training master's and doctoral level students, writing policy reports, and attending policy conferences.

Additional training opportunities are available to graduate students via internships and practica. These include:

- Summer Policy Fellowship Program Putting Children First, internships for doctoral students in the applied sciences to link their academic learning with their interests in social policy by conducting a research project in an applied setting, attending weekly seminars, and completing a report on their activities;

- Practice-Policy Internship (jointly sponsored with an international home-based instructional program), a unique opportunity to work with a home-based, early intervention program that helps parents provide educational enrichment for their preschool children;
- Educational Research Practica, research training coupled with readings and seminars for master's students and offered for course credit. Other practice and training endeavors include Summer Institutes, Continuing Education Workshops, demonstration projects, and consortium opportunities that are developed to address on-going and newly initiated policy issues affecting young children and families.

The research, policy and practice framework of the Center's work emphasizes four specific themes:

- Child Care and Early Intervention
- Families and Parenting
- Vulnerable and At-Risk Families
- Neighborhood and Community Influences.

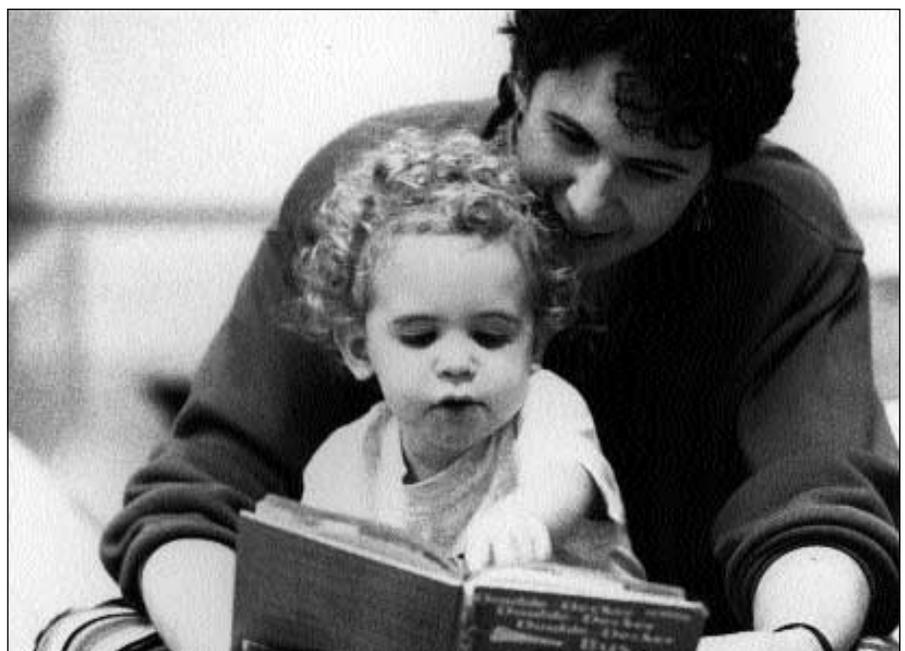
For more information, contact Professor Jeanne Brooks-Gunn, Director, Teachers College, Columbia University, Box 39, 525 West 120th St., New York, NY 10027; telephone (212) 678-3904.

The Community College Research Center (CCRC) was established in 1996 with support from the Alfred P. Sloan Foundation and is housed within the Institute on Education and the Economy (IEE). The main purpose of the CCRC is to frame critical questions concerning the fundamental purposes, problems, and performance of community colleges, and chart a course for strengthening scholarly research on the future of these important institutions.

"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, 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 Center has taken a broad and comprehensive view of the community college over the course of the grant, but focused primarily on the roles of

Professor Susan Recchia



community colleges in workforce and economic development. The specific purposes of the Center are to: (1) synthesize existing research on the roles community colleges have been playing and the extent and determinants of their effectiveness within those; (2) formulate and answer new research questions on important issues confronting the community college sector; (3) begin exploration of alternative policies and directions for community colleges; (4) attract new researchers to the field and solidify a network of community college practitioners and scholars; and (5) suggest directions for data collection. The Center draws on expertise from a national advisory panel of community college practitioners, policy makers, and research scholars. The Center funds fellowships to doctoral students who are interested in writing dissertations on community college issues. The fellowship recipients work at the CCRC and participate in research projects. Reports of research findings, occasional papers, and non-technical Briefs are available through the CCRC website, 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; <http://www.tc.columbia.edu/iee/ccrc>.

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

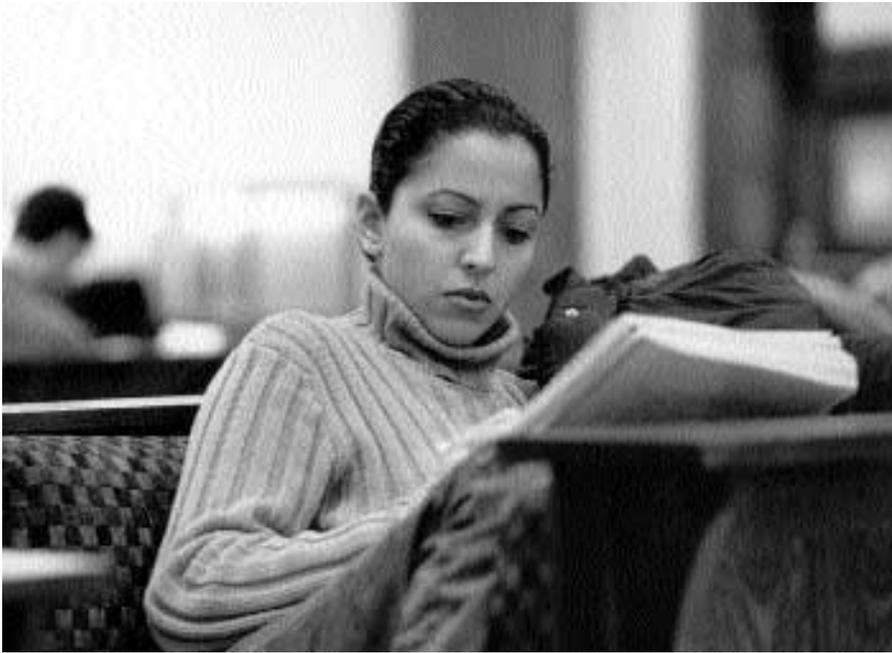


networks and educative styles of teenagers, the mediation of television by the family and television in cross-cultural perspective, family contexts of literacy, families and museums, family memories, multigenerational education, grandparents as educators, immigration, migration and family education.

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 news supervisors better understand the work of the journalists over whom they are responsible, 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. Presenters include educators from throughout the country, including members of the faculty of Teachers College. 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. 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, established in 1981, is a program of the Department of Curriculum and Teaching. The Center is a service, research, and demonstration site that is designed to provide enriching educational services for children and parents in the neighboring communities, and research, internship, and training opportunities for the graduate students at Teachers College. Primarily concerned with the optimal development of the potential of young children, the Center has been internationally recognized for its exemplary educational programs. The Director of the Center, Dr. Lisa Wright, can be reached at Box 170 or (212) 678-3851.

Service and Demonstration

The demonstration programs of the Center include the Hollingworth Preschool, the Math and Science Enrichment Classes, and the Summer Science Program. Each of these programs offers developmentally appropriate curricula that endeavor to nurture the talent development of the participants. The children served by the Center come from diverse backgrounds, some of whom are supported through scholarships.

The programs of the Center offer educators the opportunity to design and field test innovative curricula and instructional

strategies, and to subsequently disseminate the results. 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.

Research

The primary research mission of the Center focuses on the talent development of young children from diverse backgrounds. The Center currently has projects that focus on social development, spatial development, differentiated curriculum design, and the scientific thinking of young children.

Opportunities for Graduate Students

The Center is located within the Department of Curriculum and Teaching and is an integral component of the Education of the Gifted program. The Center works collaboratively with graduate students in an effort to provide relevant experiences which enhance their academic programs. These opportunities, made available to students across the College, are extensive and include internships, teaching, research, observations, seminars, assessments, and curriculum design.

The J.M. Huber Institute for Learning in Organizations conducts research on transformative learning and change in organizations. Transformative learning

involves deep, basic shifts in thinking and practice that can lead to dramatic organizational and personal gains. The Institute works through partnerships with organizations, including businesses, schools, not-for-profit and government agencies. Partner organizations and researchers associated with the Institute will create and share learning tools, strategies, and results as they work together to solve problems. Groups of organizations working together on common problems will 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 Dr. Victoria J. Marsick, at the J.M. Huber Institute for Learning in Organizations, Teachers College, Columbia University, Box 187, 525 West 120 Street, New York, New York 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 of 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 or email info@ilt.columbia.edu or phone 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.

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 equity, (3) diversity and multiculturalism, and (4) the reform of urban schooling.

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 research programs to discover solutions, (2) by translating and disseminating this knowledge and applying it in practical situations, 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 youth services.

Because the work Institute is problem-centered, it always has had a staff from many disciplines, who take an activist role 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 of Higher Education studies multicultural diversity in the curriculum, student body, faculty and staff of American higher education and regularly sponsors special symposia and conferences on these issues. The Institute also conducts research on the policies and problems, the organization, administration, and financing of educational programs of institutions and of state systems of higher education. Coordinator: L. Lee Knefelkamp, 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 cross-national 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) 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

Professor Mun C. Tsang leading a discussion on international and transcultural studies.

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-to-work 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.

The Institute is funded by grants from private foundations and the federal and state governments. It currently has funding from the W.T. Grant Foundation, the Russell Sage Foundation, the Rockefeller Foundation, the Pew Charitable Trusts, and the Alfred P. Sloan Foundation. It is also part of a consortium of seven universities and research organizations that comprise the National Center for Research in Vocational Education, which is funded by the U.S. Department of Education. 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 website, 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; <http://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 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 offers a concentration in conflict resolution that emphasizes theory, practice and research to address the needs of school systems, non-profit groups and private industry. 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 degree and non-degree students

Professor Peter Coleman 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 1400 educators from schools throughout the world have participated in Klingenstein Center programs.”

PEARL ROCK KANE, Associate Professor of Education and Director, The Klingenstein Center

throughout the College. Research and training in the following areas are supported: (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, Research Assistant Professor of Psychology and Education. For further information, contact Professor Coleman at I.C.C.C.R., Box 53, Teachers College, Columbia University, New York, NY 10027; telephone: (212) 678-3402.

The Esther A. and Joseph Klingenstein Center for Independent School Education 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



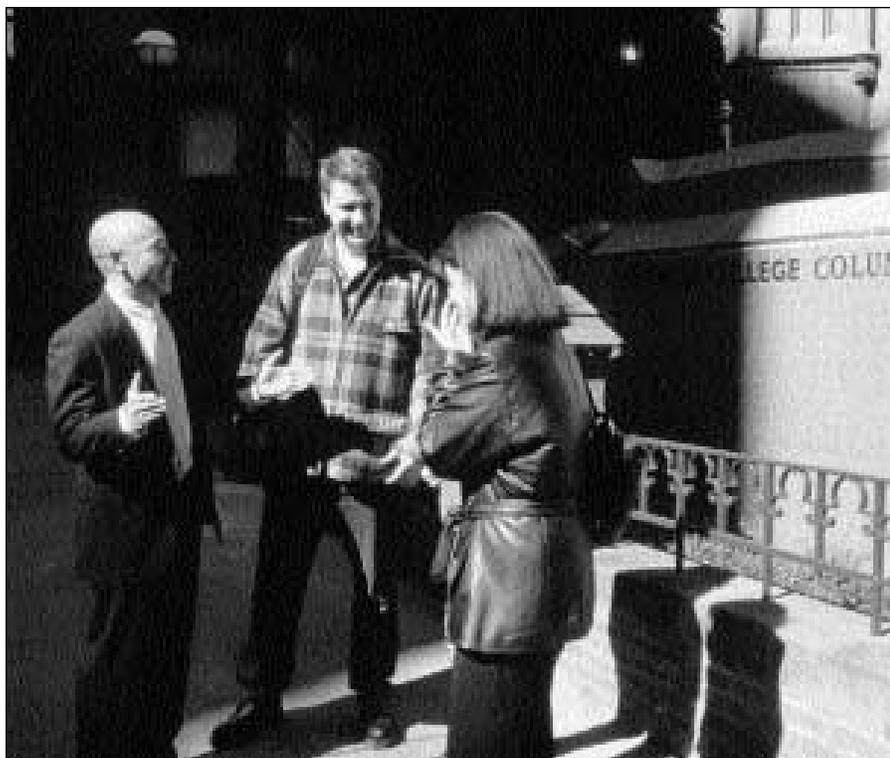
Professor Pearl Rock Kane

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 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 a month in residence at Teachers College, Columbia University 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 in the 1990s. 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 50 teachers in the independent 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 three graduate credits applicable toward a Master's degree at Teachers College or elsewhere. Teachers with more than one and a maximum of 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 round-trip travel expenses.

The Master's Degree with a concentration in Private School Leadership is co-sponsored by the Department of Educational Administration 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 independent school educators for such positions.

The curriculum focusing on private schools includes courses in the administrative leadership of private schools, legal aspects of private school administration, financial management and marketing, and optional participation in an administrative practicum or consulting project. The special features of the program include site visits to private schools and a connection with a network of cooperating schools. The program may be completed in one year of intensive study or on a part-time basis. Candidates should have at least three years of teaching experience.

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 <http://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 aligning 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.

Betty Lou Whitford 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.

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."

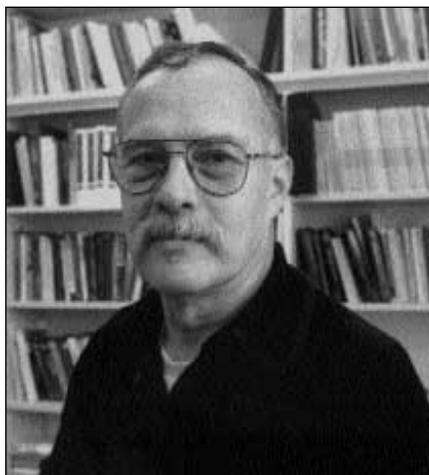
MARJORIE SIEGEL, Associate Professor of Education

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.

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 converts 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 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 conflict-



Professor Henry M. Levin



Professor Marjorie Siegel

ing claims of proponents and opponents, now centering debate on ideological grounds rather than empirical data. Housed within the Center for Educational Outreach and Innovation (CEO&I), the Privatization Center is staffed by highly regarded authorities in the fields of school choice and independent schooling, including Professor Henry M. Levin, the project director.

Dr. Levin, William Heard Kilpatrick Professor of Economics and Education, bases the bonafides of the Center on the study and evaluation of four criteria in educational policy: the freedom for parents to choose schools that mirrors 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 Center plans to disseminate the results of its research on the World Wide Web, through the media, and with the

distribution of broadsheets to interested audiences.

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.tc.edu/ncspe

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 6 weeks through 5 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

TECHNOLOGICALLY TRANSFORMED LIBRARY

“Our library both houses and connects to a vast repository of information that is easily accessible to members of our Teachers College community wherever they are and whatever they are doing. Technology has transformed the library from a manually managed center to a computer-oriented environment with information immediately available at the touch of fingertips on a keyboard. And, to help our library patrons, we offer a range of services, including instruction on the ability to use the new technology, maneuver among the various pages of the World Wide Web to connect to remote libraries with primary materials, cultural depositories and museums, evaluate vast amounts of information, and seek insights into various educational questions. We used to speak of sources as multidisciplinary. Now, we refer to them as megadisciplinary.”

JANE P. FRANCK, Director of Milbank Memorial Library

infants, toddlers and preschoolers are offered on site at the Center.

For further information contact: Dr. Sonja de Groot Kim, 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.

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.



Jane P. Franck

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-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.

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 Histor-

ical 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 others leaders in education throughout the twentieth century.

Academic Information Resources and Services

MilbankWeb, the library's World Wide Web home page located at URL: <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 World Wide 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 316,000 volumes and plans are under way to add all of the library's print and non-print collections by the year 2000. It remains necessary to consult the public card catalog for full coverage of pre-1975 materials. 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; and through dial-up to: (212) 678-4118. WebPac, the web version of EDUCAT is available from the library's home page at URL: <http://lweb.tc.columbia.edu/>. WebPac includes over 250 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 national 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 CLIO Plus, a powerful integrated library computer system and Library Web, its WWW-based counterpart. These resources link 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, online database search services, research consultation, and course-specific instructional support.

Research Services offers access to ERIC, the major education database and LLBA, the linguistic and language behavior resource, in CD ROM format. Other research-oriented databases include and 13 online FirstSearch databases available through MilbankWeb: WorldCat, Article First, Contents First, FastDoc, GPO, ERIC, Medline, Papers First, Proceedings First, ECO, NetFirst, Union Lists, and WilsonSelect. 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.

Services for Student 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 demonstrations of new educational software for acquisition. Cooperative outreach efforts include a weekly story hour for local school children. The Center's technology offers full Internet capability, a multi-laser disc player, video cassette recorders, an 8mm video viewer, fiche reader, and other instructional equipment for onsite use.

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 desktop computers, student laboratories and multi-media classrooms, audio-visual services, management information systems, telephone and satellite and video-conferencing connections, and cable television in Whittier and Lowell Halls. More extensive information may be found at the Computing and Email link on the main TC homepage at www.tc.edu.

Public Computing Facilities

The Microcomputer Center in 242 Horace Mann, with over 60 PC and Macintosh computers, provides students with an extensive array of software and the ability to share disk, files, and printer resources among the PCs and Macs. Black and white and color laser printers are available for letter quality and near photo quality printing. This laboratory is open daily, for a total of more than 90 hours per week. Students can access the Internet as well as their electronic mail accounts at Columbia University from these machines. The Microcomputer Center also provides CD-ROMs, zip drives, and a color scanner. The Center's software library includes PC and Mac programs for word processing, Web development, graphics, data graphing, spreadsheets, qualitative analysis and databases. There are also several language interpreters and compilers, including FORTRAN, Visual BASIC, C++, Turbo Pascal, Perl and Java. One room is dedicated to statistical data analysis, with SPSS, SAS and Systat on high-end machines.

Email and TC, Columbia and local websites are also accessible from 19 workstations which are located in corridors on the first and ground floors of campus build-

ings 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.

Computer Classrooms

Computer classrooms for hands-on instruction include both a PC and a Macintosh room in 345 Macy, each for 18 students. Workstations allow for computer-based full motion video from camera, VCR, or videodisk to be integrated with animation and digitized voice and music and to be written to CD, Jaz or Zip disks. The Goodman Family Computer Classroom suite, opened in 1999, includes a classroom equipped with 32 notebook computers on tables that can be reconfigured to accommodate full class or small workgroup activity for exceptional flexibility and power. Located in 234 Horace Mann, it also has a seminar room for 10 people. All four classrooms are equipped with projection equipment. 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 Macs, PCs, VCRs audio-tape players, and document cameras. There are currently 6 rooms with dedicated equipment, with plans for additional ones to be added each year.

Media Services

Interactive Media Services provides audio and video equipment, and training and support for their use. Services include lending of video cameras, audiotape recorders, as well as video playback, computer, slide, and overhead projectors. IMS also provides satellite downlink, a video studio, and video editing stations.

Electronic Mail Accounts

In an arrangement with Academic Information Systems at Columbia University, Teachers College students, faculty, and staff are entitled to electronic mail accounts that provide communications

over the Internet and space for personal home pages. This email can be accessed from the Internet. Columbia maintains a modem pool and software for dial-up access from home is distributed for a nominal fee for the media. For those for whom this is not a local call, Columbia has an arrangement with an Internet Service Provider. More information can be found on the Columbia Academic Information Services page: <http://www.columbia.edu/acis/>. EDUCAT (from Teachers College) and CLIO Plus (from Columbia) provide access to library catalogs, periodical indexes, encyclopedias, CD-ROM materials, and National Bibliographic databases. Faculty and staff also have MS Exchange e-mail accounts hosted at Teachers College to foster workgroup computing.

TC ClassWeb

Web pages are generated for all credit courses prior to each semester with basic schedule information. A friendly facility provides a discussion group and allows instructors to add syllabi and email students individually or by class. Both workshops and individual support in using this facility are provided.

Training

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

Campus Network

A full campus cabling project in 1998 brought data, voice, and video outlets to every classroom, office, and residence on the main portion of the campus. Internet and Internet-2 access are provided by Columbia University.

Video-conferencing connections are provided for special events at any location

upon request, in support of the Intel Teamstation from the Center for Educational Outreach and Innovation.

Administrative Systems

Students are able to register, drop and add classes, check grades and pay by credit card using Touchtone and World-Wide Web access.

Microcomputer/LAN Services

All faculty and staff have workstations appropriate to their work, with budgeted replacement at 25% per year. Windows NT file servers provide file and print services as well as Microsoft Exchange, MS Schedule+ and other shared applications. The CIS Help Desk provides problem resolution via telephone and office visits.

Residential Telecommunications Services

Telephone, voicemail 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.

Computing and Telecommunications Help

PC/Mac Help for Students
x 3304 or visit 242 Horace Mann

Dial-up software for use from home
pick up at 242 Horace Mann, or call
x3304

PC Users' Help Desk for faculty and staff
x 3300

Telephone service requests
x 3456 or visit 54 Thorndike Hall

Audio-visual / Classroom Equipment
x 3822 or visit 3rd floor of Russell Hall

Video editing, downlink, studio
x 3359

Cable Television for campus residents
x 3456 or visit 54 Thorndike Hall

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

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 a specific learning issues coupled with appropriate remediation, instructional planning and instruction for students with disabilities, adult and child psychotherapy, 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 and mathematics remediation are available for use by the students attending practica affiliated with the Center.

Services are provided by advanced graduate students in Applied Educational Psychology, Clinical Psychology, Counseling Psychology and Special Education. All

work is supervised by full-time 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) 678-3262; by writing to 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-SLC

Assistant Director of Audiology Services:

Teresa Boemio, M.S., CCC-A

Assistant Director of Speech and Language Services:

Laura Fitzpatrick, M.S., CCC-SLP

The Edward D. Mysak Speech-Language and Hearing Center provides advanced students in Speech and Language Pathology and Audiology master's program with additional 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 given initially; speech and language therapy sessions, a



Patricia Sweeting

CONTENT AND CREATIVITY

“Having earned a bachelor’s degree in English from the University of Notre Dame, I was attracted to Teachers College for its emphasis on content in the master’s program Teaching of English and English Education. This approach was borne out in my student teaching at an alternative middle school where I taught a novel about Egypt that corresponded to a social studies unit on Egypt. I introduced creative writing in the Humanities course when I assigned the students to write their own endings to the action adventure novel. With the support of my cooperating teacher, also a Teachers College graduate, I worked on involving kids in their own education to keep them interested in learning. In turn, I’ve learned to be myself because the class can see through anyone putting on airs. I feel I can be a catalyst to turn students on to reading and writing that sets the stage for lifelong learning.”

DAVID M. ROBINSON, M.A. '99, Teaching of English and English Education

minimum of two half-hour sessions a week, are conducted on an individual and/or small group basis. In addition, special clinics are available for infant evaluation stuttering treatment and for care and development of the speaking voice.

Aural rehabilitation services, including hearing aid dispensings, counseling about effective use of amplification, assistive listening devices and communication strategies, and speechreading therapy, are available for both children and adults.

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. Diagnostic fees are waived for Teachers College students, faculty, and staff. 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, 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



David Robinson

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 health-related 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.

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 coordinates 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 specific

A SOUTH ASIAN CURRICULUM

One of the major advantages of a Teachers College education is the availability of numerous research opportunities. After taking a course on East Asia that introduced the class to curriculum resources at Columbia University's School of International and Public Affairs (SIPA), I became interested in discovering whether a comparable history curriculum on South Asia existed. Recognizing a void, I contacted the Southern Asian Institute at SIPA and managed to join an exciting initiative to create curriculum resources on South Asia for global history teachers. I hope to apply the knowledge and skills I gained at Teachers College to produce a Web-based curriculum with diverse teaching methods that also have application for the diverse student populations in our nation's schools.

NADIA M. PERVEZ, Master of Arts Candidate in Social Studies Education

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 Dr. Joann Jacullo-Noto, Director, Office of Teacher Education.

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 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 Registrar. Basic information regarding certification in other states is also available in the Office of 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



Nadia M. Pervez

schools (ages 2 to 14) through the programs in Curriculum and Teaching

- Art, music, and dance through the programs in the Arts and Humanities in Education
- 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 pro-



- grams in Curriculum and Teaching
- Remedial reading through the programs in the Department of Health and Behavior Studies
 - English, social studies, TESOL, bilingual education, art and music through the programs in the Department of Arts and Humanities
 - Physical education through the programs in the Department of Biobehavioral Studies
 - Mathematics, general science, biology, chemistry, earth science, and physics through the programs in the Department of Mathematics, Science and Technology

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.

Internships in Elementary Education

In the programs in Curriculum and Teaching, assistant teachers employed in day-care centers, nursery schools, elementary schools, or middle schools may enter an internship program, substituting their current classroom teaching for supervised student teaching. Interns register for the Preservice Program in Elementary Education, participate in preservice seminars and receive supervision in their present settings. Openings for assistant teachers are occasionally available through the preservice programs. Interested students should apply to the Director of the Preservice Program in Elementary Education.

Post-M.A. Supervision Internships

The departments that provide student teaching or internship experience for Master’s degree candidates often employ students who are experienced teachers to assist the departmental coordinator of student teaching and internships. Appointees hold the rank of part-time instructor. Salary and degree-credit vary with the extent of responsibilities; in some cases the appointment, in addition to salary, entitles the recipient to some tuition exemption during each term of employment.

Internships for Prospective College Teachers

Most of the departments that offer the degree of Doctor of Education in the College Teaching of an Academic Subject, for which either salaried full-time teaching experience or an internship is required, can arrange for internships in colleges, including junior and community colleges, within the New York metropolitan area. Candidates, who must have completed master’s degree requirements and in some cases a second year of relevant graduate study, should apply to the appropriate program coordinators before April 1.

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 Teacher Education, Teacher Opportunity Corps, Teachers College, Columbia University, Box 97, New York, NY 10027; telephone: (212) 678-3466.

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). Anticipated scholarships (partial tuition remission) are competitive. 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.

RESEARCH FELLOWSHIPS

The Office of Teacher Education offers a limited number of research fellowships each year to qualified doctoral students. Apply directly to the Office of Teacher Education, 413 Main Hall.

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

Fully admitted doctoral candidates who find they must supplement remaining course requirements for the degree with up to a maximum of two or three graduate courses offered at another institution which participates in the Inter-University Consortium may do so with the prior written permission of the department and the Associate Dean of the College.

STUDENT LIFE AND STUDENT SERVICES

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.

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.

A HIGHLY DIVERSE STUDENT POPULATION

“The campus comes alive in late afternoon when most classes are scheduled to begin and remains well populated with students and faculty until nine o’clock in the evening. Even though we have a sizable residential population, the College is organized to accommodate a majority of our students who work in full-time positions during the day. More than anything, our student body is highly diverse. There is a generous mix of experienced professionals and recent college graduates, a large contingent of foreign students, people of all racial and ethnic backgrounds, some returning after raising a family and others interested in pursuing new careers and stepping up in the ones they have. Here, differences are what make a difference.”

YVONNE K. DESTIN, Associate Director of Student Life



Yvonne K. Destin

Career Services Center

The Career Services Center provides matriculants and alumni with the career planning resources requisite to the development and refinement of their job search skills. The resources and services offered by the Center are many and varied.

Individual consultations and group workshops on career planning and job development equip participants with the skill sets necessary for a successful job search. Career reference files contain information relevant to the all important research phase of the job search. The Alumni Mentoring Initiative matches matriculants and alumni for networking and information sharing.

Career Services Corner, the Center’s quarterly newsletter, is devoted to in-depth analyses of job search resources available to students in each academic

major. Career Services Connection, the bi-weekly job newsletter, lists openings for K–12 administrative and teaching positions as well as positions in higher education administration, college teaching, business and human services.

Employers can interview students and alumni for both internship and full-time positions on-campus at the Center. Corporate recruiting is scheduled in the Fall and late Winter. School district recruiting starts with the annual K–12 Educator’s Job Fair in late February and continues through March and April. 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. Additionally, students can visit the Career Services Centers of Columbia University and other peer institutions to broaden their job searches. The Center also publishes resume books to market the capabilities of the Teachers College student population to prospective employers.

Student Life Center

The Student Life Center includes four major areas: Disability Services, Health and Recreation, International Student and Scholar Services, and Student Activities. Through the promotion of social, cultural, co-curricular, recreational and professional

programs, the center seeks to build community, 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:

- Black Student Network
- Diversity Task Force
- Green Education Organization
- Kappa Delta Phi, a national honor society
- Korean Graduate Student Association
- Lesbian, Bisexual, Gay and Transgender Community
- Professional Counseling Association
- Society for Human Resource Management
- Society for International Education
- Soka Gakkai International-USA
- Student Dance Education Organization
- Voice Off

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.

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

International Student and Scholar Services

Teachers College has a long history of welcoming international students to our academic and social community. Currently, about 400 students from 70 countries are enrolled at all degree levels and in every department. International Student & Scholar Services (ISS) provides orientation and intercultural programs; advice on responsibilities, benefits and alternatives under Immigration laws and regulations; and counsel on personal, financial, cultural, academic and other concerns. The International Student Advisor also assists students in contacting campus and community resources when it is appropriate. The office is located in 5L Whittier Hall; telephone (212) 678-3406.

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 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.

Recreation and Fitness

Teachers College has a gymnasium equipped for basketball, indoor soccer, and jogging; a fitness center equipped with Nautilus machines, life steppers, free weights, and cycles; and a swimming pool.

Directly across the street from Teachers College is the 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.

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



Richard Keller

program available through Teachers College. Information is 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.

Other Services

Other services available to students include the Teachers College Bookstore, Teachers College Cafeteria, Information Desk, Psychological Counseling Services, Center for Infants and Parents, Office of Ombudsman, ATM and postage machines.

Faculty Members and College Officials

64 Faculty

84 Special Term Faculty

94 Officers Not In Active Service

96 Trustees and Officers

Current as of June 2, 2000

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-in-education programs. Technology in music education. Research strategies in arts pedagogy.

SELECTED PUBLICATIONS:
Foundations of Music Education (Schirmer Books). "The sex-stereotyping 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 programs and learning in and through the arts: A question of transfer?" (*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



James Albright
Assistant Professor of English Education

University; Ph.D., The Pennsylvania State University

SCHOLARLY INTERESTS:
Rethinking English as literacy education, researching literate identities from critical and cultural studies perspectives, the reflexive sociology of Pierre Bourdieu.

SELECTED PUBLICATIONS:
"Backing Out of the Room" (*English Quarterly*). "Disrupting Stephen King" (*Reading Stephen King*). "Oracy, Critical Theory, and Secondary English Education" (*Contemporary Issues in Canadian Secondary English*). "Bearing Witness: A discussion of texts, lies, and videotape" (*Educational Researcher*).

John P. Allegrante

Professor of Health Education
Department of Health and Behavior Studies
B.S., State University of New York at Cortland; M.S., Ph.D., University of Illinois

SCHOLARLY INTERESTS:
Health education in multiple settings, interdisciplinary research, health policy, international health.

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*). "Health Education Intervention Strategies: Recommendations for Future Research" (*Health Education Quarterly*). "Can net-present value economic theory be used to explain and change health-related behaviors" (*Health Education Research*).



Gregory M. Anderson
Assistant Professor of Education

Gregory M. Anderson

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, Columbia University

SCHOLARLY INTERESTS:
US 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 (in press, Peter Lang). "A User's Guide to New York City Public Elementary & Intermediate Schools: Selected Statistics, 1992-1993" (*Community Service Society of New York*). "The Dialectic of Domination in South Africa" (*Found Object, Vol. 1, No. 1*).

O. Roger Anderson

Professor of Natural Sciences and Chair of the 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*).

René V. Arcilla

Associate Professor of Philosophy and Education
Department of Arts and Humanities
B.A., Ph.D., The University of Chicago

SCHOLARLY INTERESTS:
Ethics and education. The role of philosophical study in teacher education.



René V. Arcilla
Associate Professor of Philosophy and Education

SELECTED PUBLICATIONS:

For the Love of Perfection: Richard Rorty and Liberal Education (Routledge, Chapman, Hall). "Metaphysics in Education After Hutchins and Dewey" (*Teachers College Record*). "Tragic Absolutism in Education" (*Educational Theory*). "For the Stranger in My Home: Self-knowledge, Cultural Recognition, and Philosophy of Education" (*Critical Conversations in Philosophy of Education*).

Thomas R. Bailey

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

SCHOLARLY INTERESTS:
Labor and education policy.

SELECTED PUBLICATIONS:

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 School-to-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, Columbia University

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



Charles E. Basch
Professor of Health Education

Charles E. Basch

Professor of Health Education and Chair of the Department of Health and Behavior Studies
B.S., M.S., State University of New York at Brockport; Ph.D., Southern Illinois University

SCHOLARLY INTERESTS:
Behavioral epidemiology. Health education program planning and evaluation. Urban and minority populations.

SELECTED PUBLICATIONS:

"The effect of health education on the rate of ophthalmic examinations among African Americans with diabetes mellitus" (*American Journal of Public Health*). "Using the telephone as a medium for health education" (*Health Education Quarterly*). "Promoting the selection of low-fat milk in elementary school cafeterias in an inner-city Latino community: Evaluation of an intervention" (*American Journal of Public Health*). "The Washington Heights-Inwood Healthy Heart Program: A 6-year report from a disadvantaged urban setting" (*American Journal of Public Health*). "Preventing AIDS through education: concepts, strategies and research priorities" (*Journal of School Health*).

Leslie 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*).

John B. Black

Professor of Computing and Education
Department of Human Development
B.S., Massachusetts Institute of Technology; Ph.D., Stanford University

SCHOLARLY INTERESTS:

Cognition 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* (Ablex). "Analog imagery in mental reasoning; depictive models" (*Cognitive Science*). "Shuttling between depictive models and abstract rules" (*Cognitive Science*).

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:

"White racial identity and theory: A framework for understanding reactions toward interracial situations in organizations" (*Journal of Vocational Behavior*). "Presumed incompetent? Stigmatization and affirmative 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



George A. Bonanno
Assistant Professor of Psychology and Education

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*, vol 69). "Facial expressions of emotion and the course of conjugal bereavement" (*Journal of Abnormal Psychology*, vol 106). "Toward an integrative perspective on bereavement" (*Psychological Bulletin*, vol 125). "When children tell their friends they have AIDS: Possible consequences for psychological well-being and disease progression" (*Psychosomatic Medicine*, in press).

George C. Bond
Professor of Anthropology and Education
Department of Mathematics, Science and Technology
B.A., Boston University; M.A., Ph.D., London School of Economics

SCHOLARLY INTERESTS:
Education and elite formation in the United States and Africa. African studies. African religions and politics. Agrarian transformations. Cultural dimensions of urban and minority populations.

SELECTED PUBLICATIONS:
The Politics of Change in a Zambian Community (Chicago University Press, 1976). *African Christianity* (Academic Press, 1979). *The Social Construction of the Past* (Routledge, 1994). *AIDS in Africa and the Caribbean* (Westview, 1997).

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, Columbia University

SCHOLARLY INTERESTS:
Education of gifted students. Economically disadvantaged gifted students. Conceptions of giftedness.

SELECTED PUBLICATIONS:
Planning and Implementing Programs for the Gifted (Teachers College Press). "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
B.S., Cornell University; M.A.T., Harvard University; Ph.D. (honors), 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

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

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

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 development and education of young children and their families. Children and family policy and programs. Growing up female.

SELECTED PUBLICATIONS:
Conflict and cohesion in families (ed. with M. Cox, 1998). *Neighborhood Poverty: Context and Consequences for Children. Six Studies of Children in Families in Neighborhoods, (Volume 1). Conceptual, Methodological, and Policy Approaches to Studying Neighborhoods, (Volume 2)* (Russell Sage Foundation Press, 1997). *Consequences of Growing Up Poor*. (Russell Sage Foundation Press, 1997). *Adolescent Mothers in Later Life* (Cambridge University Press, 1987). *Escape from Poverty: What Makes a Difference for Children* (Cambridge University Press, 1995). *Encyclopedia of Adolescence (Three volumes)* (Garland, 1991).

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. Social theory and ideology.

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*).



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*).

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, Hochschule Der Kuenste*).

Judith M. Burton
Professor of Art Education



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 Writing (Heinemann). *Lessons From a Child* (Heinemann). *A Teacher's Guide to Standardized Reading Tests: Knowledge is Power* (Heinemann, 1998). *Raising Lifelong Learners: A Parent's Guide* (Addison-Wesley, 1997).

Robert T. Carter

Professor of Psychology and Education and Chair of the Department of Counseling and Clinical Psychology
B.A., Columbia University; Ed.M., Teachers College, Columbia University; 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.

SELECTED PUBLICATIONS:

The Influence of Race and Racial Identity in Psychotherapy: Toward a racially inclusive model (Wiley, 1995). *Racial Identity Theory: Applications to individuals, groups and organizations* (Earlbaum, 1997). *Addressing cultural issues in organizations: Beyond the corporate context* (Sage, 1999). *Multicultural Counseling Competencies* (Sage, 1998). "Racial identity and education" (*Review of Research in Education*).

Madhabi Chatterji

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

SCHOLARLY INTERESTS:
Program evaluation design. Survey methodology. Instrument design and validation using classical and Rasch measurement. Classroom assessment (traditional and performance assessments).

SELECTED PUBLICATIONS:
"Construct validity of measures/scores of mathematics assessment using classical and many-facet Rasch measurement" (*Journal of Applied Measurement*). "Hepatitis B virus infection and vaccine acceptance among university students" (*American Journal of Health and Behavior*). "Validation of scores/measures from a K-2 developmental assessment in mathematics" (*Educational and Psychological Measurement*). "A Study of the effects of an inclusion program of elementary students with specific learning disabilities" (*Journal of Learning Disabilities*).

Peter T. Coleman

Research Assistant Professor 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:
Individual and social factors that facilitate or inhibit power-sharing in organizations and other systems. Conflict resolution and change processes. Discrimination and social justice.

SELECTED PUBLICATIONS:
“The Mediation of Inter-ethnic Conflict in Schools” (*Toward a Common Destiny: Improving Race and Ethnic Relations in America*, Jossey-Bass). “Redefining Ripeness: A Social-Psychological Perspective” (*Peace and Conflict: Journal of Peace Psychology*, Lawrence Erlbaum Associates). “Power and Influence in Conflict Resolution” (to be published in *Conflict Resolution: Theory and Practice*, edited by Morton Deutsch).

Lambros Comitas

Gardner Cowles Professor of Anthropology and Education
Department of Mathematics, Science and Technology
A.B., Ph.D., Columbia University

SCHOLARLY INTERESTS:
Sociocultural change. Education in the developing world. Drugs and society. 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 Marijuana Use* (Mouton). *West Indian Perspectives* (4 vols., Anchor Press/Doubleday). *Interdisciplinary Research and Doctoral Training: A Study of the Linköping University (Sweden) Tema Departments* (Swedish National Board of Universities and Colleges).



Madonna G. Constantine
Associate Professor of Psychology and Education

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:
“Developing competence in multicultural assessment: Implications for counseling psychology training and practice” (*The Counseling Psychologist*, 1998). “Examining social constructions in vocational counseling: Implications for multicultural counseling competency” (*Counseling Psychology Quarterly*, 1998). “The impact of managed health care on predoctoral internship sites: A national survey” (*Professional Psychology: Research and Practice*,

1998). “Post-notification day perceptions of unplaced internship applicants and their academic training directors: Recommendations for improving future internship selection processes” (*Professional Psychology: Research and Practice*, 1997).

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 at Berkeley



Isobel Contento
Mary Swartz Rose Professor of Nutrition and Education

SCHOLARLY INTERESTS:
Psychosocial factors influencing food choice, particularly among children and adolescents. Nutrition education guidelines and curriculum development. Behavioral aspects of dietary assessments.

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*).

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

SCHOLARLY INTERESTS:
Clustering and scaling methods for multivariate data. Human learning, categorization, and problem-solving.

SELECTED PUBLICATIONS:
“An efficient metric combinatorial algorithm for fitting additive trees” (*Multivariate Behavioral Research*, 1998). *Tree Models of Similarity and Association* (Sage, 1996). “Using clustering methods to explore the structure of diagnostic tests” (*Cognitively Diagnostic Assessment*, 1995). “Explaining basic categories: Feature predictability and information” (*Psychological Bulletin*, 1992).

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. The effects of school restructuring on traditional school subjects. Women's history.

SELECTED PUBLICATIONS :

"Bending the Future to Their Will": Civic Women, Social Education, and Democracy (Rowman and Littlefield). *Pedagogies of Resistance: Women Educator Activists 1880-1960* (Teachers College Press). "Mary Ritter Beard and Marion Thompson Wright: Shaping inclusive social education" (*Theory and Research in Social Education*). *Reclaiming Lost Ground: The Struggle for Woman Suffrage in New Jersey* (The New Jersey Historical Commission).

Lori A. Custodero

Assistant Professor of Music Education

Department of Arts and Humanities
Bachelor of Music, University of Redlands; M.A., California State University; D.M.A., University of Southern California

SCHOLARLY INTERESTS:

Music learning in early childhood, the incipient nature of musical experience, and musical creativity across the lifespan.

SELECTED PUBLICATIONS:

"Observing Flow in Young People's Music Learning" (*General Music Today*). "Context and Discovery: Rethinking the Nature of Creativity" (*The Orff Echo*).

Lawrence T. DeCarlo

Assistant Professor of Psychology and Education

Department of Human Development
B.A., SUNY at Stony Brook; M.A., Boston University; M.S., Columbia University; Ph.D., SUNY at Stony Brook



Lawrence T. DeCarlo
Assistant Professor of Psychology and Education

SCHOLARLY INTERESTS:

Psychological measurement and scaling, statistical methodology, repeated measures, and categorical data analysis.

SELECTED PUBLICATIONS:

"Signal detection theory and generalized linear models" (*Psychological Methods*). "On the meaning of use and kurtosis" (*Psychological Methods*). "A dynamic theory of proportional judgment: Context and judgment of length, heaviness, and roughness" (*Journal of Experimental Psychology: Human Perception & Performance*).

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

Department of Organization and Leadership
B.A., Washington University; M.A., Harvard University; Ph.D., Harvard University

SCHOLARLY INTERESTS:

The community college. The economic development role of higher education. Higher education policymaking. K-12 educational reform. Sociology of education.

SELECTED PUBLICATIONS:

"Educational organization" (co-authored with Floyd Hammack. *The Encyclopedia of Sociology*). "Community colleges and contract training" (*Teachers College Record*). "The contradictory college: The conflicting origins, Impacts and futures of community college" (*State University of New York Press*). "Mass higher education: What is its impetus? What is its impact?" (*Teachers College Record*). "Opportunity to learn standards: A sociological critique" (*Sociology of Education*).

Clea Fernandez

Assistant Professor of Psychology and Education

**Barry A. Farber**

Professor of Psychology and Education

Department of Counseling and Clinical Psychology
B.A., Queens College of the City University of New York; M.A., Teachers College, Columbia University; Ph.D., Yale University

SCHOLARLY INTERESTS:

Psychotherapy research. Self-disclosure. 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*).

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” in *Teaching and Learning in Japan* (Cambridge University Press). “Traditions of school mathematics in Japanese and American elementary classrooms” in *Theories of Mathematical Learning* (Hillsdale, NJ: Lawrence Erlbaum Associates). “Learning mathematics from classroom instruction: On relating lessons to pupils’ interpretations” (*Journal of the Learning Sciences*).

Beth A. Ferri

Assistant Professor of Education
Department of Curriculum and Teaching
B.S., Edinboro University of Pennsylvania; M.Ed., Slippery Rock University of Pennsylvania; Ph.D., University of Georgia

SCHOLARLY INTERESTS: Disability studies. Learning disabilities. Social foundations of education. Constructivist methods. Inclusive education. Women with disabilities. Feminist and critical pedagogies. Qualitative, participatory, and interdisciplinary research methods. Narrative.

SELECTED PUBLICATIONS: “Paradigms: A need for radical reform” (*in Adults with Learning Disabilities: Theoretical and Practical Perspectives*). “Women with disabilities: Missing voices” (*Women’s Studies International Forum*). “The hidden cost of difference: Women with learning disabilities” (*Learning Disabilities: A Multidisciplinary Journal*). “Profiles of college students demonstrating learning disabilities with and without giftedness” (*Journal of Learning Disabilities*).

Celia Genishi

Professor of Education
Department of Curriculum and Teaching
B.A., Barnard College; M.A.T., Harvard University; Ph.D., University of California at Berkeley

SCHOLARLY INTERESTS: Early childhood education. Language in the classroom. Qualitative research. Childhood bilingualism.

SELECTED PUBLICATIONS: *Ways of Assessing Children and Curriculum: Stories of Early Childhood Practice* (Teachers College Press). *The Need for Story: Cultural Diversity in Classroom and Community* (National Council of Teachers of English). “Visions of children as language users: Research on language and language education in early childhood” (*Handbook of Research on Young Children*). “Teaching in early childhood education: Understanding practices through research and theory” (*Handbook of Research on Teaching*, 4th ed.).

Antoinette M. Gentile

Professor of Psychology and Education
Department of Biobehavioral Studies
B.S., Brooklyn College of the City University of New York; M.S., P.E.D., Indiana University; Ph.D., State University of New York at 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 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*).



Herbert P. Ginsburg
Jacob H. Schiff Foundations Professor
of Psychology and Education

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, Columbia University

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

SELECTED PUBLICATIONS: *Assessment for Equality and Inclusion: Embracing All Our Children* (Routledge). “Multi-cultural stories: Preservice teachers’ conceptions of and response to issues of diversity” (*Urban Education*). “Voices from the margins: Asian American teachers’ experiences in the profession” (*Teacher Education Yearbook V: Research on the Education of Our Nation’s Teachers*). “Racial identity and education” (*Review of Research in Education*).

Andrew Gordon

Associate Professor of Movement Sciences and Education
Department of Biobehavioral Studies
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*) “Fingertip forces during object manipulation in children with hemiplegic cerebral palsy. II: Bilateral coordination” (*Developmental Medicine and Child Neurology*). “Development of neural mechanisms underlying grasping in children” (*Neurophysiology and Psychology of Motor Development*). “Functional magnetic resonance imaging of motor, sensory and posterior parietal cortical areas during performance of sequential typing movements” (*Experimental Brain Research*). “Task-dependent deficits during object release in Parkinson’s Disease” (*Experimental Neurology*).

Merrilyn L. Gow

Assistant Professor of Speech and Language Pathology
Department of Biobehavioral Studies
B.App.Sc., University of Sydney (Australia); M.A., Ph.D., University of California, Santa Barbara

SCHOLARLY INTERESTS:
Speech movement control, speech fluency and stuttering, neurogenic and developmental speech disorders.

SELECTED PUBLICATIONS:
"Perceptual evaluation of the naturalness of synthetic speech" (*Speech Technology Laboratory Research Reports*). "Stuttering modification and changes in phonation: Observations on findings from recent reports" (*Journal of Speech and Hearing Research*). "Stuttering and speech naturalness: Some additional data" (*Journal of Speech and Hearing Disorders*). "Sentence final accents in synthesized American English speech" (*Journal of the Acoustical Society of Japan*).

R. Douglas Greer

Professor of Education and Psychology
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.

SELECTED PUBLICATIONS:
"The educational crisis" (*Social Problems in American Society and Solutions*). "Collateral gains and short term maintenance in reading and on task by inner-city adolescents as a function of their use of social reinforcement while tutoring" (*Journal of Applied Behavior Analysis*). "The measure of a teacher" (*Behavior Analysis in Education:*

Focus on Measurably Superior Instruction). "Contingencies of the science and technology of teaching and prebehavioristic research practices in education" (*Educational Researcher*).

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" (in *Becoming (Other)wise*, in press). "Jack" (in *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*).

Zhao Hong 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, Edinburgh; Ph.D., University of London

SCHOLARLY INTERESTS:
Second language acquisition theory and processes. Second language pedagogy.

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*). "Fossilization: The status of the concept" (*Experimenting with Uncertainty*).

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:
Human development in social and cultural contexts. The study of resiliency, resistance, invulnerability and success in at-risk populations. Psychological anthropology and education. Individuals in organizations. Ethnographic design.

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).

Jay P. Heubert

Associate Professor of Education
Department of Organization and Leadership
Adjunct Professor of Law
Columbia Law School
B.A., Swarthmore College; M.A.T., Duke University; J.D., Harvard Law School; Ed.D.,

Zhao Hong Han

Assistant Professor of Language and Education



Harvard Graduate School of Education

SCHOLARLY INTERESTS:
Legal issues in education. Equal educational opportunity. High-stakes testing. Law and school reform. Interprofessional collaboration.

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 disabilities/mental retardation. Cognitive, motivational, and emotional aspects of decision-making. Cognition and comprehension. Substance abuse prevention.

SELECTED PUBLICATIONS:
 "Decision-Making and Mental Retardation" (in *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*). "Comprehension and Mental Retardation" (in *International Review of Research in 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, Columbia University

SCHOLARLY INTERESTS:
 The role of the liberal arts in teacher education. The nature of the teacher-student relationship. Educational ethics. Hermeneutics. Psychoanalytic perspectives on educational practice. Dialogue.

SELECTED PUBLICATIONS:
 "Transference love from the couch to the classroom: A psychoanalytic perspective on the ethics of teacher-student romance" (*Philosophy of Education*), "Socrates' effect/Meno's affect: Socratic elenchus as kathartic therapy" (*Philosophy of Education*).

Clifford A. Hill
Arthur I. Gates Professor of Language and Education
 Department of International and Transcultural Studies
 B.A., Wheaton College; M.A., Columbia University; Ph.D., University of Wisconsin

SCHOLARLY INTERESTS:
 Language and literacy assessment. African languages and literature. English language teaching in China.

SELECTED PUBLICATIONS:
Children and Reading Tests (Ablex Press). "English language teaching in China: A



Clifford A. Hill
 Arthur I. Gates Professor of Language and Education

policy for the year 2000" (*Foreign Languages and Translation*). "From testing to assessment: English as an international language" (*Longman*). "Recherches Interlinguistiques en Orientation Spatiale" (*Communications*).

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:
 "Visions of 'Science for All' in the Elementary Classroom". (In *Teaching for empowerment in science and technology*, Teachers College Press, in press). "A feminist revisioning of infinity: Small speculations on a big subject". ((*Post*)*Modern Science (Education): Frustrations, Propositions, and Alternative Paths*, in press). "Connecting girls and science: A feminist teacher-researcher study of a high-school prenatal testing unit" (*Journal of Research in Science Teaching*). "Response to Guest Editorial: The WISE Group:

Connecting activism, teaching and research" (*Journal of Research in Science Teaching*).

Pearl Rock Kane
Associate Professor of Education
 Department of Organization and Leadership
 B.A., City College of New York; M.A., Smith College; Ed.D., Teachers College, Columbia University

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

SELECTED PUBLICATIONS:
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*).

Barbara Kiefer
Associate Professor of Education
 Department of Curriculum and Teaching

Barbara Kiefer
 Associate Professor of Education

B.A., M.Ed., Westminster 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*).

Ursula Kirk
Associate Professor of Neuroscience and Education
 Department of Health and Behavior Studies
 B.A., M.A., Manhattanville College; M.S. in Counseling, Iona College; M.S. in Guidance, State University of New York at Albany; Ed.M., Ed.D., Teachers College, Columbia University; Certificate in Pediatric Neuropsychology, New England Medical Center, Tufts University



SCHOLARLY INTERESTS:

Developmental neuropsychology. Assessing neuropsychological development in children. Learning as a multifactorial process.

SELECTED PUBLICATIONS:

NEPSY: A Developmental Assessment of Neuropsychological Functions (The Psychological Corporation). "The development and use of rules in the acquisition of perceptual-motor skills" (*Child Development*). "Learning to copy letters: A cognitive, rule-governed task" (*Elementary School Journal*). "Confrontation naming in normally developing children: Word-retrieval or word knowledge" (*The Clinical Psychologist*).

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

SCHOLARLY INTERESTS:

Discourse analysis. Children's second language and literacy development. Computers and communication in school and at work.

SELECTED PUBLICATIONS:

"Assembling Knowledge" (*Research on Language and Social Interaction*). "Problem-solving at a circuit board assembly machine: A micro-analysis" (*NCRVE*). "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

SCHOLARLY INTERESTS:

Undergraduate curriculum. Curriculum transformation. Theories of student develop-

ment. 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 multicultural 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



Michelle G. Knight
Assistant Professor of Education

teaching practices with diverse populations.

SELECTED PUBLICATIONS:

"Ethics in Qualitative Research: Multicultural Feminist Activist Research" (*Theory into Practice*). "Finding Our Way: Challenging Oppressive Educational and Societal Practices" in *The Thought and Practice of Anti-Racist Teaching* (Routledge). "The Role of English in Anglophone Africa" (*Monterey Review*).

Susan Koff

Assistant Professor of Dance Education
Department of Arts and Humanities
B.F.A., University of Arizona; M.A., Teachers College, Columbia University; Ed.D., Temple University

SCHOLARLY INTERESTS:

Dance education: urban settings, teaching and curriculum.

SELECTED PUBLICATIONS:

"The influence of dance training and foot position on landing mechanics" (*Medical Problems of Performing Artists*). "Experiment in education: Description of an urban high school's arts-based program" (*Impulse*). "Dance science considerations of dance educators" (JOPERD). "The role of the arts in the undergraduate curriculum" (*Journal of General Education*).

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). "Metacogni-

tion, Metalinguistics and Intervention" (*Applied Psycholinguistics*). "The psycho-educational assessment of hearing impaired children" (*Auditory Disorders in School Children*, third edition, Theime and Stratton). "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*). "Developing a functional encoding screening program: Implications and relationship to action based research" (*Volta Review*).

Deanna Kuhn

Professor of Psychology and Education

Department of Human Development
B.S., University of Illinois; Ph.D., University of California at 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*).

Lawrence Haruo Kushi

Ella McCollum Vahlteich Professor of Human Nutrition
Department of Health and Behavior Studies
A.B., Amherst College; Sc.D., Harvard School of Public Health

SCHOLARLY INTERESTS:

Nutritional epidemiology. Diet and chronic disease risk. Nutrition interventions to promote health. Complementary and alternative health practices.

SELECTED PUBLICATIONS:

“Prospective Study of Diet and Ovarian Cancer” (*American Journal of Epidemiology*). “Physical Activity and Mortality in Postmenopausal Women” (*Journal of the American Medical Association*). “Healthy Implications of Mediterranean Diets in Light of Contemporary Knowledge” (*American Journal of Clinical Nutrition*). “Dietary Antioxidant Vitamins and Death from Coronary Heart Disease in Postmenopausal Women” (*New England Journal of Medicine*).

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, Columbia University

SCHOLARLY INTERESTS:

Stress and coping. Trauma reduction. Child abuse identification, intervention, and prevention. Psychopathology and schizophrenia. Legal issues in diagnosis and treatment. Cross-cultural mastery of parent-child 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*).

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. Museum education for families. Families and school reform. Immigration, migration and family education.

SELECTED PUBLICATIONS:

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

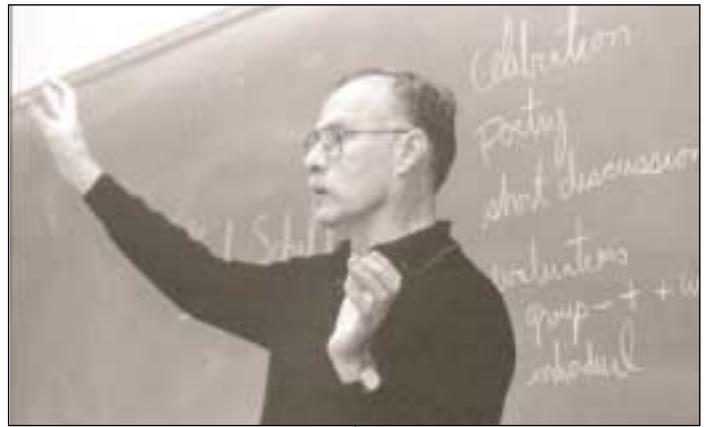
Associate Professor of Education
Department of Curriculum and Teaching
B.S., Georgetown University; M.S., University of Wisconsin-Madison; Ph.D., University of Wisconsin-Madison

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 U.S. programs and policies” (*Curriculum Inquiry*). *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)

Henry M. Levin

William Heard Kilpatrick Professor of Economics and Education and Director, National Center 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. Cost-effectiveness analysis. School reform. Educational vouchers.

SELECTED PUBLICATIONS:

“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,” in *International Handbook of Educational Change* (Kluwer Academic Publishers). “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., State University of New York at 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, 1998). *Beating the Odds: How the Poor Get to College* (Jossey-Bass). “How the Academic Profession is Changing” (*Daedalus*, Fall 1997). *When Dreams and Heroes Died: A Portrait of Today's College Students* (Jossey-Bass).

Suniya S. Luthar

Associate 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, 1999). “The construct of resilience: A critical evaluation and guidelines for future work” (*Child Development*, in press). *Developmental Psychopathology: Perspectives on adjustment, risk, and disorder*. (Cambridge University Press, 1997). “Relational Psychotherapy Mothers' Group: A developmentally informed intervention for at-risk mothers” (*Development and Psychopathology*, in press).

Dale Mann

Professor of Education
Department of Organization
and Leadership
A.B., University of California
at Berkeley; Ph.D., Teachers
College, Columbia University

SCHOLARLY INTERESTS:
Learning technology. Entertainment
and telecommunications
contributions to educational
improvement. International
school reform. The politics of
schools and education.

SELECTED PUBLICATIONS:

“Home Again: Private and Public Prospects for Internet Delivered Learning @ Home”. “Serious Play” (*Teachers College Record*, Spring 1996). “Technology and Achievement” (*The American School Board Journal*, July 1997). *Making Change Happen?* (Teachers College Press).

Victoria J. Marsick

Professor of Education and Co-director, 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
at Berkeley

SCHOLARLY INTERESTS:
Workplace learning. Learning
organizations. International
models of management.

SELECTED PUBLICATIONS:

Informal and Incidental Learning in the Workplace (Routledge). *Sculpting the Learning Organization* (Jossey-Bass). *Team Learning Survey* (Organization Design and Development).

Jason H. Mateika

Assistant Professor of Movement Sciences and Education
Department of Biobehavioral
Studies
B.Sc., University of Guelph
(Canada); M.Sc., Ph.D., Uni-
versity of Toronto (Canada)

SCHOLARLY INTERESTS:
Exercise and breathing. Sleep
disordered breathing and its
effect on cardio-respiratory
function.



Jason H. Mateika

Assistant Professor of Movement Sciences and Education

SELECTED PUBLICATIONS:

“Spontaneous baroreflex analysis in non-apneic snoring individuals during NREM sleep” (*Journal of Sleep and Sleep Disorders Research*). “Response of human tongue protruder and retractors to hypoxia and hypercapnia” (*American Journal of Respiratory and Critical Care Medicine*). “Long-term facilitation of upper airway respiratory muscle activity in the cat” (*Journal of Applied Physiology*). “Co-activation of tongue protruder and retractor muscle during chemoreceptor stimulation in the rat” (*Journal of Physiology*).

Robert O. McClintock

Professor of History and Education
Department of Mathematics,
Science and Technology
A.B., Princeton University;
M.A., Columbia University;
Ph.D., Teachers College,
Columbia University

SCHOLARLY INTERESTS:
Applications of digital technol-
ogy to educational reform. Inter-
action of political and educa-
tional theory. Urban education.

SELECTED PUBLICATIONS:

Power and Pedagogy: Transforming Education Through Information Technology (Institute for Learning Technologies). *Man and His Circumstances: Ortega as Educator* (Teachers College Press). “Renewing the progressive con-

tract with posterity” (*U.S. Department of Education Whitepaper on Technology and Learning*).

Elizabeth Midlarsky

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

SCHOLARLY INTERESTS:
Psychoeducational approaches
to mental and physical health
in siblings of children with dis-
abilities, older adults, and
women. Altruism, helping and
volunteerism. Life span and
aging issues. Sex roles. 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 through the life course” (*Family Caregiving Across the Lifespan*). “The generous elderly” (*Psychology and Aging*). “Competence, reticence and helping” (*Developmental Psychology*).

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, depres-
sion and substance abuse,
related risk factors and protec-
tive factors.

SELECTED PUBLICATIONS:

“Intergenerational transmission of parental bonding among women” (*Journal of the American Academy of Child & Adolescent Psychiatry*). “Religion and depression; Ten year follow-up of depressed mothers and offspring” (*Journal of the American Academy of Child & Adolescent Psychiatry*). “A case study of religious ceremony on a psychiatric inpatient unit” in Bergin, A. & Richards, P.S. (Eds.) (APA Books). “Self-esteem and depression; Ten year follow-up of depressed mothers and offspring”, (*Journal of Affective Disorders*), (in press).

Dennis E. Mithaug

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

SCHOLARLY INTERESTS:
Equal opportunity. Disabilities
studies. Moral and political
theory. Self-determination.
Self-regulation. Social Policy.
Special education leadership.



Dennis E. Mithaug
Professor of Education

SELECTED PUBLICATIONS:

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 Wisconsin at Madison; Ed.D., Teachers College, Columbia University

SCHOLARLY INTERESTS:

Probability. Statistical inference. Multivariate techniques. Psychological factors that relate to performance in statistics, cognitive abilities and attitudes.

SELECTED PUBLICATIONS:

Introductory Statistics (Scott Foresman).

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 Texas-Pan American; M.A., Pan American University; Ph.D., University of Michigan

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" (in *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). "College planning: A cultural perspective" (in *Journal for Higher Education Management*).

Nel Noddings

Professor of Philosophy and Education

Department of Arts and Humanities

B.A., Montclair State College; M.A., Rutgers University; Ph.D., Stanford University

SCHOLARLY INTERESTS:

Philosophy of education with special interest in feminist ethics, moral education and mathematics education.

SELECTED PUBLICATIONS:

The Challenge to Care in Schools (Teachers College Press). *Caring: A Feminine Approach to Ethics and Moral Education* (U. California). *Educating for Intelligent Belief or Unbelief* (Teachers College Press). *Philosophy of Education* (Westview).

Debra A. Noumair

Associate Professor of Psychology and Education

Department of Organization and Leadership

B.S., Boston University; Ed.M., Ed.D., Teachers College, Columbia University

SCHOLARLY INTERESTS:

Power and authority relations. Influence of diversity, authority and identity on relationships at work. Gender issues.

SELECTED PUBLICATIONS:

"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*). "Self and identity in career development: Implication for theory and practice" (*Journal of Counseling and Development*).

Kathleen A. O'Connell

Isabel Maitland Stewart Chair 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.



Kathleen A. O'Connell
Isabel Maitland Stewart Chair 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*, 1987). "Reversal theory and smoking: a state-based approach to ex-smokers' highly tempting situations" (*Journal of Consulting and Clinical Psychology*, 1990). "Why rational people do irrational things: The theory of psychological reversals" (*Journal of Psychosocial Nursing*, 1991). "Coping in real time: Using ecological momentary assessment techniques to assess coping with the urge to smoke" (*Research in Nursing and Health*, 1998).

Honor O'Malley

Associate Professor of Audiology
Department of Biobehavioral Studies

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 Acoustical Society of America*).

Margaret Terry Orr

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

SCHOLARLY INTERESTS:
School restructuring and
reform. Problem solving and
organizational change. School-
to-work transition for sec-
ondary and post-secondary edu-
cation. Dropout prevention.
Evaluation and action research.

SELECTED PUBLICATIONS:
*Opportunities and Choices: Lessons
Learned From a Community Youth
Services Effort* (Peter Lang Pub-
lishing, Inc., in press). *Keeping
Students in School* (Jossey-Bass).
*Evaluating School-to-Work Tran-
sitions* (National Institute on
Work and Learning). "Linking
secondary schools and commu-
nity colleges for school-to-work
transition" (*Journal of Research
Vocational Education*, in press).

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. Per-
son-organization fit. Socializa-
tion of newcomers. Selection.
Training.

SELECTED PUBLICATIONS:
"Moving HR to a higher level:
Human resource practices and
organizational effectiveness" (in
*Multilevel Theory, Research, and
Methods in Organization*, Jossey-
Bass). "Meta-analysis, level of
analysis, and best estimates of
population correlations: Cau-
tions for interpreting meta-
analytic results in organiza-
tional behavior" (*Journal of
Applied Psychology*). "Self-other
agreement: Does it really mat-
ter?" (*Personal Psychology*). "The
effects of climate and personal

influences on individual behav-
ior and attitudes in organiza-
tions" (*Organizational Behavior
and Human Decision Processes*).
"The relationship between sat-
isfaction, attitudes and perfor-
mance: An organizational level
analysis" (*Journal of Applied
Psychology*).

Celia Oyler

Assistant Professor of Education
Department of Curriculum and
Teaching
B.S., Southern Connecticut
State College; M.Ed., Univer-
sity of Vermont; Ph.D., Uni-
versity of Illinois at Chicago

SCHOLARLY INTERESTS:
Issues of power. Equity and
social justice. Inclusion of stu-
dents with disabilities in gen-
eral education.

SELECTED PUBLICATIONS:
*Making Room For Students: Shar-
ing Teacher Authority in Room
104* (Teachers College Press).
"Teaching beyond the progres-
sive-traditional dichotomy:
Sharing authority and sharing
vulnerability" (*Curriculum
Inquiry*). "Sharing authority:
Student initiations during
teacher-led read-alouds of
information books" (*Teacher and
Teacher Education*). "Them and
us: Finding irony in our teach-
ing methods" (*Journal of Cur-
riculum Studies*)

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, soci-
ology of the life course,
research methodology, school
effects and effectiveness, and
social organization of schools.

SELECTED PUBLICATIONS:
"Rites and wrongs: Institu-
tional explanation for the
course scheduling in urban
high schools" (*American Journal
of Education*). *Research in Social-*

*ogy of Education and Socializa-
tion*, vol. 12 (JAI Press). "The
effects of schooling on individ-
ual lives" (in *Handbook of Sociol-
ogy and Education*).

Rupal Patel

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

SCHOLARLY INTERESTS:
Alternative and augmentative
communication. Motor speech
disorders. Information transmis-
sion using assistive technology.

SELECTED PUBLICATIONS:
"Prosody conveys information
in severely impaired speech"
(*Proceedings of the European Speech
Community Association Workshop
on Dialogue and Prosody*).
"Teachable interfaces for indi-
viduals with severe physical and
speech disabilities" (with D.
Roy in *American Association for
Artificial Intelligence Workshop on
Assistive Technology*). "Identify-
ing salient prosodic aspects of
dysarthric vocalizations" (*Pro-
ceeding of the International Society
for Alternative and Augmentative
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 disabili-
ties in children and adults.
Curriculum and pedagogy in
community colleges. Adult and
workplace literacy.

SELECTED PUBLICATIONS:
"Professionalizing adult liter-
acy: Would a credential help?"
(*Journal of Adolescent and Adult
Literacy*). "Workplace literacy
assessment" (*Dyslexia*). "Assess-
ing the reading-writing relation
in adult literacy students"
(*Reading Psychology*). "What
should workers learn in work-

place Basic Education Pro-
grams?" (*Adult Learning*).
"Understanding dropout in an
urban worker education pro-
gram: Retention patterns,
demographics, student percep-
tions, and reason given for early
departure" (*Urban Education*).

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

SCHOLARLY INTERESTS:
Social cognition and human
resource decision making. The
effects of demographic charac-
teristics on human resource
judgments and organizational
behavior. Diversity training and
sexual harassment awareness
training effectiveness. The role
of national culture and technol-
ogy in the performance feed-
back process.

SELECTED PUBLICATIONS:
"A closer look at the effects of
subordinate-supervisor age dif-
ferences" (*Journal of Organiza-
tional Behavior*). "A cognitive
approach to understanding dis-
crimination: A closer look at
applicant gender and age"
(*Research in Personnel and Human
Resources Management*). "Moderat-
ing effects of personal and con-
textual factors in age discrimi-
nation" (*Journal of Applied
Psychology*). "Explaining gender-
based selection decisions: A syn-



Elissa L. Perry
Assistant Professor of Psychology
and Education

thesis of contextual and cognitive approaches" (*Academy of Management Review*).

Lisa Ann 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. Higher education and workforce preparation. Access and equity in math and science education.

SELECTED PUBLICATIONS:
Case Studies On Information Technology in Education. "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., State University of New York of Albany; Ph.D., Pennsylvania State University
SCHOLARLY INTERESTS:
Cognition and instruction, studying, memory.

SELECTED PUBLICATIONS:
"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*). "Problems of knowledge-based explanations of memory and development" (*Review of Educational Research*).

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.

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" (*Journal of Aesthetic Education*). "Experience, critical thinking and problem solving in music teacher preparation" (*Music Educators Journal*).

Linda C. Powell

Associate Professor of Psychology and Education
Department of Organization and Leadership
B.S., Northwestern University; M.Phil., George Washington University; Ph.D. George Washington University
SCHOLARLY INTERESTS:
Group relations theory. Urban school reform efforts. Professional development/graduate education for educators.

SELECTED PUBLICATIONS:
Off-White: Essays on Society, Race and Culture (Routledge Press). "Facing reality: Using Racial Identity Theory with urban public schools" (*Racial Identity Development Theory: Applications to Individual, Group, and Organizational Interventions*, Lawrence Erlbaum Associates). "In our own hands: Diversity literacy."



Linda C. Powell
Associate Professor of Psychology and Education

(*Transformations*). "Interpreting social defenses: Family group in Philadelphia public schools" (*Chartering Urban School Reform: Reflecting on Urban High Schools in the Midst of Change*, Teachers College Press).

James E. Purpura

Assistant Professor of Linguistics and Education
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:
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 Counseling and Clinical Psychology
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 (Farber, B.A., Brink, D.C., & Raskin, P.M., 1996). *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
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B.A., University of California at Santa Cruz; M.A., California State University at Northridge; Ph.D., University of California at Los Angeles

SCHOLARLY INTERESTS:
Social and emotional development of young children. Adult-child relationships across contexts. Infants and preschoolers with special needs.

SELECTED PUBLICATIONS:
"Social Communication and Response to Ambiguous Stimuli in Toddlers with Visual Impairments" (*Journal of Applied Developmental Psychology*). "Establishing Intersubjective Experience: Developmental Challenges for Young Children with Congenital Blindness and Autism and their Caregivers" (*Blindness and Psychological Development in Young Children*). "The issue of Multiple Path-

ways in the development of handicapped children" (*Issues in the Developmental Approach to Mental Retardation*). "Self-evaluation in young children" (*Monographs of the Society for Research in Child Development*).

D. Kim Reid

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B.A., Montclair State University; M. Ed., Temple University; Ph.D., Temple University

SCHOLARLY INTERESTS:

Social and individual forces in learning. Cognitive approaches to learning disabilities.

SELECTED PUBLICATIONS:

"Scaffolding: A broader view" (*Journal of Learning Disabilities*, 1999). "Narrative knowing: Basis for a school-university partnership" (*Learning Disabilities Quarterly*, 1997). *Language development, differences, and disorders: A perspective for general and special education teachers and classroom-based speech language pathologists* (Austin, TX: PRO-ED, 2000). *La colaboración en el aula como medio de ayuda a los alumnos con dificultades de aprendizaje del lenguaje* (Ediciones Pirámide, Madrid, Spain, 2000).



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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

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SCHOLARLY INTERESTS:

Health care administration. Health care law. Nursing administration and education. Consumer satisfaction with health care. Humanistic applications in health care delivery.

SELECTED PUBLICATIONS:

The Empathy Construct Rating Scale (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).

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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*).

H. Jane Rogers

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SCHOLARLY INTERESTS:

Differential item functioning. Estimation and modeling issues in item response theory.

SELECTED PUBLICATIONS:

Fundamentals of Item Response Theory (with R. K Hambleton & H. Swaminathan; Sage); "A comparison of the logistic regression and Mantel-Haenszel procedures for detecting differential item functioning" (with H. Swaminathan, *Applied Psychological Measurement*); "Detecting differential item functioning using logistic regression procedures" (with H. Swaminathan, *Journal of Educational Measurement*).

Ernst Z. Rothkopf

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SCHOLARLY INTERESTS:

Psychology of human learning and instruction. Information technology in education. Management of training.

SELECTED PUBLICATIONS:

"Adjunct aids and the control of Mathemagenic Activities during purposeful reading" (*Reading Expository Materials*). "Statistical inference of individual styles in purposeful reading" (*Mathematical and Statistical Models in Behavioral Research*). "Persistence in memory of the surface organization of simple maps as performance aids" (*Information Design Journal*). "Particularization: Inductive [Speeding] of Rule-Governed Decisions by Narrow Application Experience" (*Journal of Experimental Psychology: Learning, Memory and Cognition*).

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SCHOLARLY INTERESTS:
Applied and historical linguistics in the teaching of Spanish. Distance learning. Poetry in Spanish.

SELECTED PUBLICATIONS:
Una Poetica Moderna (University of Alabama Press and National University of Mexico Press). "The image of the language teacher" (*Journal of English as a Second Language*). "A modern methodology for teaching Chinese" (*Journal of the American Association of Teachers of Chinese*).

John Saxman

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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*).

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SCHOLARLY INTERESTS:
Curriculum and teaching history, theory and practice. Teacher preparation. Caring and values education. Religious education.

SELECTED PUBLICATIONS:
Growing Up Caring: Exploring Values and Decision-Making (McGraw Hill). "Supervision in historical perspective" (1992 *ASCD Yearbook: Supervision*). "Curriculum implementation" (*AERA Handbook on Research on Curriculum*). "Promise and Possibility: Learning to Teach" (*Teachers College Record*, 1998).

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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 Shipp

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SCHOLARLY INTERESTS:
History and politics of urban school reform. Private interests in school governance. Organizational and institutional analysis.

SELECTED PUBLICATIONS:
Reconstructing the Common Good in Education: Coping with Intractable American Dilemmas (co-author, Stanford University Press) "The Politics of Urban

School Reform: Legitimacy, City Growth and School Improvement in Chicago" (*Educational Policy*) "Corporate Involvement in School Reform" in Clarence Stone (Ed.) *Changing Urban Education* (University Press of Kansas). "The Invisible Hand: Big Business and Chicago School Reform" (*Teachers College Record*).

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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*).

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SCHOLARLY INTERESTS:
Physical education. Research on teaching. Research methodology.



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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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SCHOLARLY INTERESTS:
Organizational theory. Urban high schools. School assessment.

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

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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
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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:
Multicultural Educational Policies in Postmodern Societies (Leske & Budrich, Germany). "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*).



Graeme L. Sullivan
Associate Professor of Art Education

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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). "Critical Interpretive Inquiry: A Qualitative Study of Five Contemporary Artists' Ways of Seeing" (*Studies in Art Education*). "Beyond the Quantitative and Qualitative Divide: Research in Art Education as Border Skirmish" (*Australian Art Education*). *Critical Influence: Interactive CD-ROM* (University of New South Wales).

Robert P. Taylor
Associate Professor of Computing and Education

Department of Mathematics, Science and Technology
B.A., Denison University;
B.D., M.A., University of Chicago; Ed.D., Teachers College, Columbia University

SCHOLARLY INTERESTS:
Computer-based technology in education, across the curriculum, and around the world, including its utility for human survival in a balanced ecosystem.

SELECTED PUBLICATIONS:
The Computer in the School: Tutor, Tool, Tutee (Teachers College Press). "Communicative Technology and the Emerging Global Curriculum" (*ACM Siccae Outlook*). "The use of the computer in teaching mathematics" (*Journal of Technology and Teacher Education*). "Educational problems and solutions incorporating technology" (in Spanish, *Memorias: El Congreso Colombiano de Informatica Educativa*).

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Associate Professor of Social Studies and Education
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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 studies. Teaching policies and educational practice. Teaching of history.

SELECTED PUBLICATIONS:
"Teacher as a curricular-instructional gatekeeper in social studies" (*Handbook of Research on Social Studies Teaching and Learning*). "Toward the desirable in social studies teaching" (*Advances in Research on Teaching, Vol. 4: Case Studies of Teaching and Learning in Social Studies*). "The social studies near century's end: Reconsidering patterns of curriculum and instruction" (*Review of Research in Education, Vol. 20*). *The Curriculum Studies Reader* (editor with David Flinders, Routledge Press).

Maria Emilia Torres-Guzman
Associate Professor of Bilingual Education
Department of International and Transcultural Studies
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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:
"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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SCHOLARLY INTERESTS:
Costs and financing of education. Chinese education policy. Education and economic development.

SELECTED PUBLICATIONS:
"Financial reform of basic education in China" (*Economics of Education Review*). "Cost analysis of educational inclusion of marginalized population" (UNESCO). "The impact of surplus schooling on worker productivity" (*Industrial Relations*). "The development of human capital in an emerging economic: The case of Shenzhen China" (*China Quarterly*).

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
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B.A., Purdue University; M.A., University of Illinois at 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*).

Ruth Vinz
Associate Professor of English Education and Chair of the Department of Arts and Humanities
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SCHOLARLY INTERESTS:
Changes in the nature and structure of English classrooms. Research on teaching English. Representation in research. Multicultural and Interdisciplinary education. Adolescent readers and writers.

SELECTED PUBLICATIONS:
Composing A Teaching Life (Heinemann, Boynton/Cook). *On Writing Qualitative Research: Living by Words* (Falmer). "Horror-scapes: (In)Forming adolescent identity and desire" (*Journal of Curriculum Theorizing*). "Opening moves: Conversations on the first year of teaching" (*English Education*).

Bruce R. Vogeli
Clifford Brewster Upton Professor of Mathematics
Department of Mathematics, Science and Technology
B.S., Mount Union College; A.M., Kent State University; Ph.D., University of Michigan

SCHOLARLY INTERESTS:
International and comparative mathematics education. Education of the mathematically gifted.

SELECTED PUBLICATIONS:
SBG Mathematics (six-book series, Silver Burdett and Ginn.) *Special Schools for the Mathematically Talented — an International Pandrama* (Lampadia Foundation.) *Houghton Mifflin Mathematics* (seven-book series; Senior Author).

Cally L. Waite
Assistant Professor of History and Education
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B.A., New College; M.A., 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; the history of teacher training.

SELECTED PUBLICATIONS:
"The Invisible 'Talented Tenth', Women and Dubois," in *Feminist Engagements*, (Routledge Press, in Press).

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:
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. Diversity training for multicultural competence.

SELECTED PUBLICATIONS:
Ending Violence in the Lives of The Chemically Dependent: A Clinician's Guide (in press, Jason Aronson). *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).

James D. Westaby
Assistant Professor of Psychology and Education
Department of Organization and Leadership
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SCHOLARLY INTERESTS:
Work attitudes and motivation. Organizational change and development. Customer satisfaction. Job search and reemployment.

SELECTED PUBLICATIONS:
"Factors Underlying Behavioral Choice: Testing a New Reasons Theory Approach" (*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 of Occupational Behavior" (*Basic and Applied Social Psychology*).



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SCHOLARLY INTERESTS:
Education reform, school-university partnerships, Professional Development Schools.

SELECTED PUBLICATIONS:
"Assessment and accountability in Kentucky: How high stakes affect teaching and learning" (*International Handbook of Educational Change*, 1998); "Of promises and unresolved puzzles: Reforming teacher education through Professional Development Schools" (NSSE Yearbook, 1999); *Accountability, Assessment, and Teacher Commitment: Lessons from Kentucky's reform efforts* (SUNY Press, 2000); *Knitting It All Together: Collaborative teacher education in Southern Maine* (AACTE, in press).

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,
Columbia University

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 (co-authored, Prentice-Hall). *Encyclopedia of Early Childhood Education* (Garland). *ALERTA: A Multicultural,*

Bilingual Approach to Teaching Young Children (Addison-Wesley). "Does practice lead theory? Teachers' constructs about teaching: Bottom-up perspectives" (*Advances in Early Education and Day Care*, vol. 8, Jai Press).

Christine J. Yeh

Assistant Professor of Psychology and Education

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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*).



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SCHOLARLY INTERESTS:

Action Learning. Collaborative Inquiry. Qualitative Research Methods. Strategic Approaches to Human Resource Development.

SELECTED PUBLICATIONS:

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*, Berrett Koehler). "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*).

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Ph.D., University of Chicago

SCHOLARLY INTERESTS:

Curriculum. Teaching. Teacher education. Alternative routes to certification.

SELECTED PUBLICATIONS:

"Research on teaching: Policy implications for teacher education" (*NSSE Yearbook*). *Improving Teaching* (ASCD Yearbook). "Curriculum implementation" (*AERA Handbook of Research on Curriculum*). "Beginning professional teachers: The need for a curricular vision of teaching" (*AACTE Knowledge Base for Beginning Teachers*).

ARTS AND HUMANITIES

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B.A., Columbia University,
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B.A., Seton Hill College, 1965;
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A.B., Roosevelt University,
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Kenneth H. Toepfer. *Professor Emeritus of Higher Education*
A.B., Cornell (Iowa), 1951;
M.I.A., Columbia, 1953,
Ph.D., 1966

Paul Vahanian. *Associate Professor of Psychology and Education*
A.B., Florida Southern, 1949;
A.M., Columbia, 1952, Ed.D.,
1957

Charles W. Walton. *Professor Emeritus of Music Education*
M.B., Oberlin, 1938; M.M.,
Cincinnati Conservatory, 1939;
A.M., Columbia, 1947, Ed.D.,
1951

Sloan R. Wayland. *Professor Emeritus of Sociology and Education*
A.B., Hendrix, 1940; A.M.,
Louisiana State, 1941; Ph.D.,
Columbia, 1951

Mary Alice White. *Professor Emeritus of Psychology and Education*
A.B., Vassar, 1941; A.M.,
Columbia, 1944, Ph.D., 1948

Richard M. Wolf. *Professor Emeritus of Psychology and Education*
B.A., Antioch College, 1957;
Ed.M., University of Buffalo,
1959; Ph.D., University of
Chicago, 1964

Warren Yasso. *Professor Emeritus of Natural Sciences*
B.S., Brooklyn College; A.M.,
Columbia, 1961, Ph.D., 1964

Trustees

Antonia M. Grumbach,
Co-Chair
Enid W. Morse, *Co-Chair*
John Klingenstein, *Vice Chair*

James W. B. Benkard
Beverly Chell
Patricia M. Cloherty
James P. Comer, MD
Joyce B. Cowin
Gay Culverhouse
Joseph Dionne
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Ruth L. Gottesman
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John W. Hyland, Jr.
Elliot S. Jaffe
A. Clark Johnson, Jr.
John Klingenstein
Arthur Levine
Claude A. Mayberry, Jr.
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Ronald A. Nicholson
Jeffrey Peek
William D. Rueckert
George Rupp
H. Marshall Schwarz
Laurie Tisch Sussman
Sue Ann Weinberg

Officers

George Rupp, Ph.D.
President of the University

Arthur Levine, Ph.D.
President of the College

Scott Fahey, M.Ed.
*Secretary of the College and
Assistant to the President*

Fred A. Schnur, B.B.A., C.P.A.
*Vice President for Finance and
Administration*

Joseph S. Brosnan, Ed.D.
*Vice President of Development and
External Affairs*

Edmund Gordon
Interim Dean of the College

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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 |
| ITS | for | International and Transcultural Studies |
| MST | for | Mathematics, Science and Technology |
| ORL | for | Organization and Leadership |
| 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.

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 programs 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 and Continuing Education (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
- Clinical Psychology Post-doctoral Respecialization (TZH): 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): Fall only
- Early Childhood (TYZ) Ed.D.: Fall only
- Early Childhood Special Education (TYZ) Ed.D.: Fall only
- Educational Administration (TA) Ed.D. & Ph.D.: Fall only
- Educational Leadership & Management (TAA): Ed.D./M.B.A.: Fall only
- Gifted Education (TYZ): Ed.D.: Fall only
- Higher Education (TDJ): Fall only

- History and Education (TFH): Ph.D. and Ed.D.: Fall only
- Inquiry in Educational Administrative Practice (TAI): Summer only
- Learning Disabilities (TYZ): Ed.D.: Fall only
- Motor Learning (TRM) Ed.M. & Ed.D.: Fall & Spring only
- Neurosciences and Education (TKN & TZL): Fall only
- Nurse Executives (TNR & TNZ) 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 and Audiology (TQC) M.S.: Fall only
- Student Personnel Administration (TDH): Fall only

Programs not accepting applications after the Priority Deadline

- Adult and Continuing Education (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.
- Curriculum and Teaching (TYZ) Ed.D.
- Developmental Psychology (TKD)
- Early Childhood (TYZ) Ed.D.

Early Childhood Special Education (TYZ) Ed.D.
Educational Administration (TA) Ed.D. & Ph.D.
Educational Leadership & Management (TAA): Ed.D./M.B.A.
Gifted Education (TYZ): Ed.D.
History and Education (TFH) Ph.D. & Ed.D.
Learning Disabilities (TYZ): Ed.D.
Politics and Education (TFG) Ph.D. & Ed.D.
Religion & Education (TFU) Ed.D.
School Psychology (TKL & TKT) Ed.M., Ph.D. & Ed.D.
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 and Continuing Education (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
Clinical Psychology Post-doctoral Respecialization (TZH)
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)
Higher Education (TDJ)
History and Education (TFH) M.A.
Instructional Technology & Media (TUT) M.A. & Ed.M.
Mathematics Education (TCA)
Measurement, Evaluation, and Statistics (TMM & TMX)
Motor Learning (TRM)
Music and Music Education (TGM) Ed.D & Ed.D.C.T.
Nutrition and Education (TSA, TSB, TSC)
Philosophy and Education (TFP)
Physical Education (TRC, TRP)
Politics and Education (TFG) M.A. & Ed.M.
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
Student Personnel Administration (TDH)
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)

Chair: Professor Ruth Vinz
Location: 445A Macy
Telephone Number:
(212) 678-3362
Fax: (212) 678-3376

Programs:

Arts:

Art and Art Education
Arts Administration
Dance and 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)
Maxine Greene (Philosophy and Aesthetics)—Emeritus
Joseph S. Lukinsky (Jewish Theological Seminary)
Mordecai Rubin (Spanish)

Adjunct Professors:

Dino Anagnost (Voice, Conducting)
Gay Brookes (TESOL)
Angiola Churchill (Painting)
Robert Greenblatt (Arts Administration)
Joan Jeffri (Arts Administration)
Bert Konowitz (Jazz)

Associate Professors:

René V. Arcilla (Philosophy)
John M. Broughton (Philosophy/Cultural Studies)

Margaret Smith Crocco (Social Studies)
Lenore M. Pogonowski (Music)
Graeme Sullivan (Art)
Stephen J. Thornton (Social Studies)
Ruth Vinz (English)

Adjunct Associate Professors:

Lan-Ku Chen (Music)
Eugenia Earle (Harpsichord)
Alvin Fossner (Oboe, Saxophone)
Franklin E. Horowitz (Applied Linguistics)
Solomon Mikowsky (Piano)
Joy Moser (Painting)
Hadassah Sahr (Piano)

Assistant Professors:

James Albright (English)
Lori Custodero (Music)
Gregory W. Hamilton (English)
ZhaoHong Han (Applied Linguistics/TESOL)
Christopher Higgins (Philosophy)
Susan Koff (Dance)
James E. Purpura (Applied Linguistics/TESOL)

Adjunct Assistant Professors:

Philip Aarons (Arts Administration)
Joe Amorino (Art Education)
Jennifer Burns (Philosophy)
Alice H. Deakins (Applied Linguistics)
Janice Dowd (TESOL/Applied Linguistics)
Martha Eddy (Dance)
Leonard Fleischer (Arts Administration)
Susan Glaser (Music, Flute)
Jeanne C. Goffi (Voice)
Mari Haas (TESOL)
Robert Horowitz (Music)
Thomas Hoyt (Music)
Chin Kim (Music)
I. Fred Koenigsberg (Arts Administration)
Leonard Leibowitz (Arts Administration)
Roberta Martin (Social Studies)
Michael B. Nord (Music Technology)
Alison Nowak (Music Theory, Composition)

Estrella Pujadas (Spanish)
Jennybelle Rardin (TESOL)
Nathalie Robinson (Music)
Prabha Sahasrabudhe (Art)
John Schuder (Organ)
Barbara Tischler (Arts Administration/Social Studies)
Haruko Yoshizawa (Synthesizer, Jazz Piano)

Lecturers:

Janine Graziano-King (Applied Linguistics/TESOL)
Tatsuya Komatsu (TESOL, Tokyo)
Pamela Martin (TESOL/Applied Linguistics)
Masumi Muramatsu (TESOL, Tokyo)
Terry Royce (TESOL, Tokyo)
Marilyn Shaw (English)
Howard A. Williams (Applied Linguistics)

Instructors:

Randall E. Allsup (Saxophone)
Ronald Anderson (Trumpet)
Mary Barto (Flute)
Barbara Bashaw (Dance)
Stanley Bednar (Violin)
Elsa Bekkala (Painting)
Evangeline Benedetti (Cello)
Martha Bixler (Recorder)
Beth Brisbane (English)
Rika Burnham (Museum Studies)
Don Butterfield (Tuba)
Alexander K. Cates (TESOL, Tokyo)
Carolyn Clark (Arts Administration)
Julian Cohen (Social Studies)
Renee Darvin (Art Education, Museum Studies)
Judith Davidoff (Renaissance Instruments)
Alan de Mause (Guitar)
Evelina Dimitrova (TESOL)
Megen Driscoll (English)
Margaret Dwyer (TESOL)
Laurance Fader (Viola)
Bayard Faithful (Social Studies)
Ethan Feinsod (Photography)
Ellen Flanagan (English)
Shakti Gattegno (TESOL)
Carolyn Graham (TESOL)
Deborah Greh (Computer Graphics)

Sheldon Henry (French Horn)
A. C. Hickox (Dance)
Sheila A. Hones (TESOL, Tokyo)
Susan Jolles (Harp)
Caitlin Kirmser (English)
Lisa Klein (English)
Ada Kopetz-Korf (Piano)
Jeffrey Kraus (Percussion)
Lori Don Levan (Photography)
Marijeanne Liederbach (Dance)
Thomas Lollar (Ceramics)
Linda Louis (Art Education)
Michael Marino (Social Studies)
Stephen Maxym (Bassoon)
Linda McKnight (String Bass)
Oneida Morrober-Tester (Spanish)
Michael Pellettieri (Printmaking)
Claire Porter (Dance)
James Preiss (Percussion)
Raymond S. Pultinas (English)
Alan Raph (Trombone, Baritone)
Mary Anne Rose (Drawing)
René Schillinger (English)
Deborah Schwartz (Museum Studies)
Stephen Shapiro (English)
Susan Stempleski (TESOL)
Alan Stepansky (Cello)
Mykola Suk (Piano)
Peter Swords (Arts Administration)
Gerard Vezzuso (Photography)
Martin Vinik (Arts Administration)
Lisa Vujovich Rigisich (English)
Brenda Wallace (English)
Eric Weeks (photography)
Judith Weller (Sculpture)
Jena Wellman-Smith (Voice)
Julian Williams (English)
Martha Williams (Cello)

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 two-fold: To promote proficiency in 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 into 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 to engage human endeavor across the life span. 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 swiftly 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

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 TOEFL (250 computer) or 10 English Language proficiency 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 State-approved program for those wishing to teach art K-12 in public schools.

The 60 point Ed.M. degree is designed for individuals seeking the highest level of professional achievement within the arts in education. The degree is also designed for students contemplating future doctoral study. Applicants are required to have a minimum three years of experience as an educator or practicing professional in the arts; 30 points of prior graduate study may be transferred providing they meet the requirements for the degree. Applicants for the 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 State-approved teacher certification. Students in other M.A. degree programs may opt for the state-approved 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 Education 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 in Art Education (32 points)

Required courses in Art Education (14 points minimum):

- A&HG 4080, Artistic development: Children
- A&HG 4088, Artistic development: Adolescence to Adulthood
- A&HG 4081, Curriculum design in Art Education
- A&HG 4085, Historical foundations in Art Education
- Studio: Two sessions
- A&HG 5922, Masters 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 in Art Education with Teachers Certification (38 points)

Required courses in Art Education (26 points minimum):

- A&HG 4080, Artistic development: Children
- A&HG 4088, Artistic development: Adolescence to Adulthood
- A&HG 4281, Field observation in Art Education (two sessions)
- A&HG 4081, Curriculum design in Art Education
- A&HG 4085, Historical foundations in Art Education

- A&HG 4087, Processes and structures in the visual arts
- A&HG 5181, The arts in education
- Studio (two sessions)
- A&HG 4079, America's cultures: Implications for Art Education
- A&HG 4722, Supervised student teaching and seminar: elementary
- A&HG 4702, Supervised student teaching and seminar: secondary
- Plus: two weekend workshops, topics vary each year
- C&TY 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&HG 4080, Artistic development: Children and/or
- A&HG 4088, Artistic development: Adolescence to Adulthood
- A&HG 4081, Curriculum design in Art Education
- A&HG 5001, Research methods in arts education
- A&HG 4087, Processes and structures in the visual arts
- A&HG 5181, The arts in education
- Studio (two sessions)

- A&HG 5581, Studio seminar
- A&HG 4079, America's cultures: implications for Art Education
- A&HG 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&HG 5001, Research in arts education
- A&HG 5581, Studio seminar
- A&H 5500, Pro-seminar
- A&HG 6502, Doctoral seminar
- A&HG 7502, Dissertation seminar (two sessions)
- A&HG 8900.02, Dissertation advisement

Suggested courses (15 points minimum):

- A&HG 4070, Artistic development: children
- A&HG 4088, Artistic development: adolescent to adult
- A&HG 5081, Advanced curriculum design
- A&HG 4085, Historical foundations
- A&HG 4082, Arts in contemporary life
- A&HG 4087, Processes and structures

- A&HG 6021, Arts administration and supervision
- A&HG 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&HG 6002, Teaching art at the college level
- A&HG 5081, Curriculum in higher education
- A&HG 6482, Internship or special project
- A&HG 5581, Studio seminar
- A&H 5500, Pro-seminar
- A&HG 6502, Doctoral seminar

- A&HG 7502, Dissertation seminar (two sessions)
- A&HG 8900.02, Dissertation advisement

Suggested courses (10 points minimum):

- A&HG 4088, Artistic development: adolescent to adult
- HUDK 5021, Aesthetic development
- A&HG 5082, Philosophies of art in education
- A&HG 4082, Arts in contemporary life
- A&HG 5001, Research in arts education
- A&HG 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&HG 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&HG 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 adminis-

trative settings through analysis of programs, projects, policy issues, and political processes that involve the visual arts, dance, music, and theater. Special fee: \$30.

A&HG 5581. **Art and contemporary culture (2)**
Dr. Moser and Guest Critics. Permission required. Required seminar for Ed.M. and Ed.D. An examination of the role of artculture in contemporary life, employing experiences from art works—museums, galleries and alternative spaces—readings and discussion. Special fee: \$25.

A&HG 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&HG 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&HG 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&HG 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&HG 4078. **Art for classroom teachers: Teaching art to children (2)**

Ms. Louis. 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 \$30.

*A&HG 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&HG 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: \$10.

A&HG 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&HG 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&HG 4086. Current issues and practices in art and art education (2–3)

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

A&HG 4087. Processes and structures in the visual arts (2–3)

Dr. Amorino. Opportunity for in-depth and sustained exploration of the properties, structures and expressive uses of selected art materials. The course aims to enrich and extend personal visual repertoires and, in parallel, provoke insights about the role of materials in supporting, integrating and challenging the artistic growth of young people in school. Prerequisite: A&HG 4080, A&HG 4088, or permission of instructor. Required of all students in all degree programs. Special fee: \$30.

***A&HG 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 State Art Certification K–12. Special fee: \$10.

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

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&HG 4281. Field observations in art education (1)

Ms. Louis and Ms. Petrillo. Required of M.A. students or art teacher certification majors. To be taken concurrently with A&HG 4080, Artistic development of children, and A&HG 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&HG 4702. Supervised teaching in art education: secondary (3)

Ms. Darwin. 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 4087 and A&HG 4088. M.A. candidates should plan to take student teaching in their last semester of course work towards their degree.

A&HG 4722. Supervised student teaching in art education: elementary (3)

Ms. Darwin. 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&HG 4080, A&HG 4081, A&HG 4087, and A&HG 4088. M.A. candidates should plan to take student teaching in their last semesters as final course work towards their degrees.

***A&HG 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&HG 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&HG 4081 or consent of instructor. Special fee: \$20.

A&HG 5085. Varieties of visual experience: Museums and education (2)

Ms. Darwin. 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&HG 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&HG 5804. Museums as resource: Workshops at the Metropolitan Museum (1–4)**

Professor Burton or Ms. Darwin. 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&HG 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&HG 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&HG 6021. Supervision and administration in arts education (3)

Ms. Darwin. 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&HG 6520. Seminar in clinical supervision in the arts: K through 12 (2)

Ms. Darwin. 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&HG 4061. Printmaking I: Lithographic processes (Non-credit 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: TBA plus special fee.

*A&HG 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: TBA plus special fee.

*A&HG 4063. **Painting I** (Noncredit or 2–3)
Ms. Bekkala. Development of fundamental painting skills and understandings within the quest for individual expression and style. Oils, acrylics, collage, and watercolor employed. Noncredit fee: TBA. Special fee: \$30.

*A&HG 4084. **Art and technology** (Noncredit or 2–3)
Dr. Greh. 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.

A&HG 4089. **New media, new forms: Technological trends in art education** (2–3)
Dr. Greh. 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&HG 4092. **Ceramics I** (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: TBA plus special fee.

*A&HG 4093. **Sculpture I** (Noncredit or 2–3)
Ms. Weller. 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: TBA plus special fee.

*A&HG 4094. **Photography I** (Noncredit or 2–3)
Mr. Vezzuso. An introductory course in black and white photography and darkroom techniques. Participants will study applications of the camera as an instrument for producing artistic images, and the darkroom as a setting for reproducing those images, as well as the implications for using these techniques within various educational settings and contexts. Special fee: \$100. Noncredit fee: TBA plus special fee.

*A&HG 5060. **Drawing from life** (Noncredit or 2–3)
Ms. Rose A critical examination of the relationship among structure, form and surface in drawing from life: objects, humans and landscape. Students will track the emergence and development of expressive configurations in their own work from the vantage point of evolving aesthetic and critical responses. Special fee: \$60. Noncredit fee: TBA plus special fee.

*A&HG 5061. **Printmaking: Lithography II** (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: TBA plus special fee.

*A&HG 5062. **Printmaking: Etching II** (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: TBA plus special fee.

*A&HG 5063. **Painting II** (Noncredit or 2–3)
Ms. Bekkala. 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: TBA. Special fee: \$30.

*A&HG 5092. **Ceramics II** (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: TBA plus special fee.

*A&HG 5093. **Sculpture II** (Noncredit or 2–3)
Ms. Weller. Further studies of sculptural elements with an emphasis on content, craft, and individual development. Special fee: \$100. Noncredit fee: TBA plus special fee.

*A&HG 5094. **Photography II** (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: TBA plus special fee. Prerequisite: A&HG 4094 or equivalent.

*A&HG 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&HG 4094 or equivalent. Special fee: \$100.

Independent Studio Work

A&HG 6902. **Studio work in art and education: Sculpture** (Noncredit or 1–4)
Faculty. Permission required. Enrollment limited. For advanced independent study. Noncredit for

majors only. Special fee: \$100. Noncredit fee: TBA plus special fee.

A&HG 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. Noncredit fee: TBA plus special fee.

A&HG 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. Noncredit fee: TBA plus special fee.

A&HG 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. Noncredit fee: TBA plus special fee.

A&HG 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. Noncredit fee: TBA plus special fee.

A&HG 6907. **Studio work in art and education: Photography** (Noncredit or 1–4)
Faculty. Permission required. Enrollment limited. Prerequisites: A&HG 4094, A&HG 5094 or extensive experience in photography and darkroom techniques. For advanced independent study. Noncredit for majors only. Special fee: \$100. Noncredit fee: TBA plus special fee.

A&HG 6999. **Exhibition rating** (0)
Rating of certification Ed.M. and Ed.D. exhibitions: offered in fulfillment of degree requirements. To be taken during the semester in which work is presented in the Macy Art Gallery. Special fee: \$120.

Independent studies and research

A&HG 4202. Fieldwork in art education (1–4)

Permission required. Professional activities in the field under faculty supervision.

A&HG 4902. Research and independent study in art education (1–4)

Permission required. Research and independent study under the direction of a faculty member.

A&HG 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&HG 5902. Research and independent study in art education (1–4)

Permission required. Research and independent study under the direction of a faculty member.

A&HG 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&HG 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&HG 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&HG 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

Degree offered:

Master of Arts (M.A.)

Special Application Requirements/Information:

In addition to the general Teachers College admission requirements, applicants to the program must submit a third letter of reference and scores on the GRE General Test. Personal statements of 750–1000 words should indicate why applicants wish to pursue careers in arts administration, what led them to this point and what they feel makes them good candidates for admission to the program and to the field. An interview is required for finalists and will be arranged at any time in the application process by the Program Coordinator. 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 non-profit sectors.

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

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. A special area of study has been created with the Program in Art Education which focuses on Museum 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 (3)
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 4173. Arts in context (3)
Dr. Tischler. 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 (3)
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)
Dr. Fleischer. 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 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)
Mr. Vinik. Permission 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/Mr. Vinik. 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; 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 course-work 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&HG 4048. Creative computing applications in education and the arts (3)
A&HG 4079. Exploring America's cultures: Implications for arts education (Noncredit or 2-3)
A&HG 4090. Museum issues I: Art museums and their culture (3)
A&HG 5090. Museum issues II: missions and standards (3)
A&HG 5001. Research in arts education (3)
A&HG 5002. Assessment strategies for the arts (Noncredit or 3)
A&HG 5019. Dance in cultural contexts (2-3)
A&HG 5082. Philosophies of art in education (2-3)
A&HG 5181. The arts in education (2-3)
A&HG 5804. Museums as resource: Workshops at the Metropolitan Museum (1-4)
A&HG 6021. Supervision and administration in arts education (3)

Dance and Dance

Education

(Code: TGD)

Program Coordinator: Professor Susan Koff

Degree offered:

Master of Arts (M.A.)

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.

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&HG 5012, Kinesiology for dance
- A&HG 5017, Movement retraining
- A&HG 4018, Laban Movement Analysis I
- A&HG 5013, Choreography I
- A&HG 5018, Dance Production
- A&HG 5019, Dance in cultural contexts: theory and application
- A&HG 5120, Introduction to dance research
- A&HG 5007, Curriculum design in dance education
- A&HG 5016, Teaching dance: adolescence through adulthood OR
- A&HG 5110, Teaching children's dance

The K-12 certification track will complete both A&HG 5016 and A&HG 5110, a teaching practicum (A&HG 4203 Fieldwork) and Supervised Student Teaching (A&HG 4703) as well as several education courses.

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

Body Sciences

A&HG 5012. **Kinesiology for dance** (Noncredit or 3) Ms. Liederbach. 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: \$200.

*A&HG 5017. **Movement retraining** (Noncredit or 2) Dr. Eddy. Provides an experimental framework for movement learning for dancer/choreographers, spe-

cial educators, dance and arts educators and school psychologists. Based on the systems of Bartenieff Fundamentals and Body-Mind Centering both teaching experientially the observable features of motor development and their relationship to child and adult movement habits. Special fee: \$25. Noncredit fee: \$200.

Performance Practice and Analysis

*A&HG 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: \$200.

*A&HG 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: \$200.

*A&HG 4014. **Ballet I** (Noncredit or 2)
Faculty. Practice and examination of the fundamentals of classical ballet, including elements of technique, theory, and historical background. Noncredit fee: \$200.

*A&HG 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: \$200.

*A&HG 4018. **Laban movement analysis I** (Noncredit or 3)
Ms. Porter. 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: \$200.

*A&HG 4019. **Laban movement analysis II** (Noncredit or 2–3)
Dr. Eddy. Prerequisite: A&HG 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 spatial 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: \$200.

A&HG 5013. **Choreography I** (Noncredit or 2–3)
Ms. Porter. 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: \$25. Noncredit fee: \$200.

A&HG 5014. **Choreographic problems** (2–3)
Ms. Porter. Permission required. Prerequisites: A&HG 5013 or equivalent. An in-depth exploration of creative process and teacher/learner interactions as applied to the teaching of choreography. Special fee: \$25.

A&HG 5018. **Dance production** (0–2)
Ms. Hickox. A lecture/laboratory class focusing on theory and practice of production of dance concerts and events. Special fee: \$25. Tuition for zero (0) points: \$200.

A&HG 5111. **Dance technique** (Noncredit or 1)
Faculty. 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: \$50. Noncredit fee: \$200.

Theory: Research and Implementation

A&HG 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&HG 5019. **Dance in cultural contexts: Theory and application** (Noncredit or 3)
Professor Koff. 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: \$200.

A&HG 5120. **Introduction to dance research** (2)
Professor Koff. 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&HG 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&HG 4203. **Fieldwork in dance education** (1–4)
Professor Koff. Permission required. Professional activities in the field under the supervision of a member of the dance education program faculty.

A&HG 4703. **Supervised teaching in dance education** (4)
Professor Koff. Permission required. Prerequisites: A&HG 5016 and A&HG 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&HG 5007. **Curriculum design in dance education** (Noncredit or 3)
Professor Koff. 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: \$200.

*A&HG 5016. **Teaching dance: Adolescence through adulthood** (Noncredit or 3)
Professor Koff. Prerequisites: A&HG 4018, A&HG 5110, or equivalent. Enrollment limited. Theory, practice, history and philosophy of goals, concepts, methods and strategies for teaching dance in various settings of adolescents and adults of all ages. Special fee: \$25. Non credit fee: \$200.

*A&HG 5110. **Teaching children's dance** (Noncredit or 3)
Ms. Bashaw. Permission required. Enrollment limited. An exploration of the materials and methods of children's dance as an art form and as an educational tool to enhance learning in the classroom or studio setting. Includes theory and practice in planning, implementing, and evaluating children's dance. Special fee: \$25. Noncredit fee: \$200.

A&HG 5203. **Fieldwork in dance education** (1–4)
Faculty. Permission required. Professional activities in the field under the supervision of a member of the dance education program faculty.

A&HG 5519. **Current topics and issues in dance education** (1–3)
Professor Koff. 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:

- BBSK 4005. **Applied anatomy and biomechanics** (3)
- A&HG 4020. **Music for the world's children** (2-3)
- A&HG 4048. **Creative computing applications in education and the arts** (3)
- A&HG 4079. **Exploring America's cultures: Implications for arts education** (3)
- A&HG 4082. **The arts in contemporary life** (2-3)
- A&HG 4084. **Art and technology** (Noncredit or 2-3)
- A&HG 4089. **New media, new forms: Technological trends in art education** (2-3)
- A&HG 4090. **Museum issues I: Art museums and their culture** (3)
- A&HG 5001. **Research in arts education** (3)
- A&HG 5002. **Assessment strategies for the arts** (Noncredit or 3)
- A&HG 5025. **Creativity and problem solving in music education** (Noncredit or 2-3)
- A&HG 5082. **Philosophies of art in education** (2-3)
- A&HG 5181. **The arts in education** (2-3)
- A&HG 5804. **Museums as resource: Workshops at the Metropolitan Museum** (1-4)
- A&H 5500. **Pro-seminar in arts and humanities** (2)

Music and Music

Education:

(Code: TGM)

Program Coordinator:
Professor Harold Abeles

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 with only a few students being admitted 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. The deadline for applications is January 2nd.

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 36 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 students 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. No more than 12 points of graduate credit from other faculties of the University may be applied to the minimum point requirement, and no points will be accepted from other institutions.

A student enrolled in the 32-point master's degree is expected to plan a program of study with an advisor that reflects a balance of work in each of four areas of music study, based upon the training, experience and specific needs of the student. The four areas of music study are: 1) Pedagogy, 2) Research, 3) Comprehensive Musicianship, and 4) Music Performance. In order to broaden the student's background, in addition to the course work in music, three Teachers College courses (a course is defined as one for which at least two points are earned) outside of the Program (A&HG) are required. Specifically, students are expected to enroll in:

- (1) At least two courses from the Pedagogy area, one of which must be selected from the following:
 - A&HG 5020, Foundations of music education
 - A&HG 5025, Creativity and problem solving in music education
 - A&HG 5026, Music skills and the creative strategy
 - A&HG 6001, Teaching and administration of the arts in college music
- (2) At least one course from the Research Area (A&HG 5023, Vocal Pedagogy, may be used to fulfill this requirement).

- (3) At least one course from Comprehensive Musicianship Area.
- (4) At least one course from the Music Performance Area.
- (5) The remaining courses in music can be selected from any of the four areas, in consultation with your advisor.

In order to graduate at student must complete the necessary course work, complete a summative project, and demonstrate competent musicianship in performance.

Master of Arts with K-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 36-point degree program leads to both the M.A. degree and New York State Teacher of Music, K-12 Certification. Students desiring state certification should identify themselves at their first registration, and be assigned to the 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 (10 points):

- A&HG 5025, Creativity and Problem Solving in Music Education
- A&HG 5026, Music Skills and the Creative Strategy
- A&HG 4701, Supervised Teaching of Music Section 1
- C&TY 4504, Child Abuse/Alcohol and Drug Abuse Detection

Pedagogy Requirements (8 points): Students may choose courses from the Teachers College Catalog with the assistance of the faculty advisor.

Required Non-Departmental Courses (6-9 points): Three Teachers College courses, each a minimum of 2 points, selected from outside of the Program in Music Education (courses other than "A&HG").

Other Music Courses (9-12 points): Elective courses to fulfill state certification requirements

In order to graduate students must complete the necessary course work, 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&HG). 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 pro-

gram 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.

- I. Fundamentals of Administration (6 points)*
Courses chosen in consultation with Certification Coordinator.
Suggested courses:
- 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

- II. Curriculum and Teaching: (6 points)*
Courses chosen in consultation with Certification Coordinator.
Suggested courses:
- C&TY 4004, Basic course in School Improvement
 - C&TY 4008, Creativity, critical thinking, and curriculum design
 - C&TY 4051, Supervision for elementary and secondary schools
 - C&TY 4052, Designing curriculum and instruction

- C&TY 4145, The education of youth and adolescents
- C&TY 4160, Supervision in pre-service teacher education programs
- C&TY 5053, Staff development processes and procedures
- C&TY 6152, Changes in role and organization of instructional leaders

III. Music Education: (6 points)

- A&HG 5020, Foundations of Music Education
- A&HG 6021, Supervision and administration in arts education

IV. Internship: (1–4 points)

- A&HG 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) Compre-

hensive 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 has 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 the current Catalog for more specific information.

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

Pedagogy

A&HG 5141-A&HG 5143. **Special topics in music** Faculty. Selected topics of interest in music examined in depth. Topic announced each semester.

A&HG 5141. **Research** (Noncredit or 1–4)

A&HG 5142. **Pedagogy** (Noncredit or 1–4)

A&HG 5143. **Comprehensive Musicianship** (Noncredit or 1–4)

*A&HG 4020. **Music for the world's children** (2–3) Mr. Allsup. Focuses on the development of student's musical think-

ing 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&HG 4021. **Designing musical experiences for young children** (2–3)

Professor Custodero. Enrollment limited to 25. 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&HG 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&HG 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&HG 4029. **Introduction to new technologies in music education** (2–3)

Dr. Nord. 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&HG 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&HG 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&HG 4051. **Musical theater in education** (2–3)

Faculty. A study of the process of producing a musical in educational theater. A brief survey of the history of the American musical. Special emphasis given to the functions of the director and musical director at all phases of the production process. Students acquire skills as directors and singer-actors through scene study. Materials fee: \$30.

A&HG 4701. **Supervised teaching in music education** (4)

Professor Pogonowski. Permission required. 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. Prerequisites: A&HG 5025. M.A. candidates who are student teaching must complete a minimum of 36 points.

A&HG 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&HG 5021. **Piano instruction for children** (Noncredit or 1–3)

Professor Custodero. For private and group music teachers. Developmentally appropriate strategies and materials for keyboard instruction integrating improvisation, composition, movement, singing, and ensemble playing. Special fee \$25.

A&HG 5023. **Vocal pedagogy I** (3)
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&HG 5024. **Vocal pedagogy II** (3)
Dr. Goffi. Permission required. Prerequisite: A&HG 5023. Continuation of background studies begun in A&HG 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&HG 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&HG 5026. **Music skills and the creative strategy** (Noncredit or 3)
Professor Pogonowski. Enrollment limited to 25. Prerequisite: A&HG 5025. Designed for pre-service and in-service majors to examine and experience problem-solving techniques for developing musical skills within the framework of the creative strategy. Materials fee: \$30.

A&HG 5029. **Intermediate and advanced applications of new technologies in music education** (Noncredit or 2–3)
Dr. Nord. 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&HG 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&HG 5921. **Master's seminar in music education** (2)
Professor Custodero. 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 culminating in the development of a master's project. Special fee: \$25.

A&HG 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&HG 6022. **Piano teaching in college** (Noncredit or 1–3)
Faculty. Procedures and materials for piano and electronic keyboard instruction at college level, including non-music beginners, music education majors and professional pianists.

A&HG 6023. **The teaching of applied music in college** (2–3)
Dr. Glaser. 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&HG 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&HG 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&HG 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&HG 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&HG 5003. **Introduction to music perception and cognition** (3)
Professor Abeles. An examination of acoustic and psychological foundations of music.

A&HG 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&HG 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&HG 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&HG 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&HG 5030. **Music analysis** (3)
Dr. Nowak. 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&HG 5031. **Counterpoint** (2)
Faculty. The study of counterpoint techniques in a wide range of Baroque, classical, and romantic settings with analysis and related writing assignments.

A&HG 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&HG 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&HG 5040-A&HG 5041. **Interpretation of piano literature** (Noncredit or 3)
Faculty. Prerequisite: A&HG 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&HG 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&HG 6030. **Composition and analysis** (3)
Dr. Nowak. Prerequisite: A&HG 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&HG 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&HG 5050. **Advanced conducting and interpretation** (Noncredit or 2–3)
Dr. Anagnost. Prerequisite: A&HG 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&HG 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&HG 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&HG 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&HG 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&HG 4059-A&HG 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&HG 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: \$35.

*A&HG 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: \$35.

*A&HG 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: \$35.

*A&HG 4351. **Harpichord instruction I** (Noncredit or 2)
Dr. Earle. Written permission from the Music Education Program, Room 520A Horace Mann, required. Harpichord lessons

designed especially for keyboard students with no previous harpichord 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: \$35.

*A&HG 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: \$35.

A&HG 4355-A&HG 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&HG 4357-A&HG 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&HG 4357. **Instrumental** (Noncredit or 1)
A&HG 4358. **Vocal** (Noncredit or 1)

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

A&HG 5058-A&HG 6058. **Recital**
For music majors only. Co-require: 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&HG 5058. **Recital I** (0–1)
Open only to music education program majors at the M.A. level.
A&HG 6058. **Recital II** (0–1)
Open only to music education program majors at either the Ed.M. or Ed.D. level.

A&HG 5150-A&HG 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: \$35.

A&HG 5150. **Violin**
A&HG 5151. **Trumpet**
A&HG 5152. **Harp**
A&HG 5153. **Cello**
A&HG 5154. **Viola**
A&HG 5155. **String Bass**
A&HG 5156. **Percussion**
A&HG 5157. **French Horn**
A&HG 5158. **Trombone, Baritone**
A&HG 5159. **Tuba**
A&HG 5160. **Oboe**
A&HG 5161. **Saxophone**
A&HG 5162. **Flute**
A&HG 5163. **Clarinet**
A&HG 5164. **Bassoon**
A&HG 5165. **Recorder**
A&HG 5166. **Guitar**
A&HG 5167. **Synthesizer**
A&HG 5168. **Strings**
A&HG 5169. **Woodwinds**
A&HG 5170. **Brass**
A&HG 5171. **Renaissance Instruments**

A&HG 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 expe-

rience, and intensive understanding of teaching strategies. With the permission of the advisor, students may register continuously for the above number. Special fee: \$35.

A&HG 5351. **Harpichord instruction II** (Noncredit or 2) Dr. Earle. For music majors only. Written permission from the Music Education Program, Room 520A Horace Mann, required. Advanced harpichord 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: \$35.

A&HG 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: \$35.

A&HG 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: \$35.

A&HG 5355. **Art and technique of keyboard accompaniment** (2–3) 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&HG 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&HG 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&HG 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&HG 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&HG 6201, Section 001. **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&HG 6201, Section 002. **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&HG 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&HG 6481. **Internship in the teaching of college music** (3) Dr. Glaser. Guided experiences in the teaching of music in departments of metropolitan-area colleges.

A&HG 6501. **Doctoral seminar in music education** (1–3) For music majors only. For music doctoral candidates to identify their area of research interest and to narrow their dissertation topic.

A&HG 6901. **Advanced study** (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&HG 6901 001. **Advanced Study in Music Education**

A&HG 6901 002. **Advanced Study in Composition**
Prerequisites: A&HG 5032 and A&HG 5033 or equivalent

A&HG 6901 003. **Advanced Study in Conducting**
Prerequisites: A&HG 4050 and A&HG 5050.

A&HG 6901 004. **Advanced Study in Early Childhood Music**
Prerequisites: A&HG 4021

A&HG 6901 005. **Advanced Study in Jazz**
Prerequisites: A&HG 4059 and A&HG 4060.

A&HG 6901 006. **Advanced Study in Music Analysis**
Prerequisites: A&HG 5032 and A&HG 5033 or equivalent

A&HG 6901 007. **Advanced Study in Music Technology**
Prerequisites: A&HG 4029 and A&HG 5029 or equivalent

A&HG 6901 008. **Advanced Study in Repertoire**

A&HG 6901 009. **Advanced Study in Applied Music Pedagogy**

A&HG 6901 010. **Advanced Study in Harpsichord Pedagogy**

A&HG 6901 011. **Advanced Study in Organ Pedagogy**

A&HG 6901 012. **Advanced Study in Piano Pedagogy**

A&HG 6901 013. **Advanced Study in Voice Pedagogy**

A&HG 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&HG 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&HG 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&HG 4079. **Exploring America's cultures: implications for arts education** (Noncredit or 2–3)
A&HG 5002. **Assessment strategies for the arts** (Noncredit or 3)
A&HG 5082. **Philosophies of art in education** (2–3)
A&HG 5181. **The arts in education** (2–3)
A&HG 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

Degrees offered:

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

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 either:

- submit a minimum score of 5 on the Test of Written English (TWE) in addition to the college-wide requirement of a minimum score of 600 on the TOEFL or a computer-based score of 250 or
- submit a score of B or better on the Cambridge Certificate of Proficiency in English (CPE) or
- submit a score of 7.0 or better on the Cambridge International English Language Testing System (IELTS) or
- successfully complete level 10, including the essay portion, of the English Placement Test (EPT) administered by the Columbia University American Language Program.

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 received after the priority deadline will not be reviewed.

Ed.M./Ed.D. applicants must have a degree in Applied Linguistics or TESOL; a writing sample is required.

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
- Sociolinguistics
- Language acquisition
- Second language literacy
- Language pedagogy
- Testing and assessment

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 that will provide breadth in the field of Applied Linguistics.

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) (3–4)

In addition, students must complete a master's project written on a theme or research topic arising from their interests and subject to approval by their advisor.

Master of Education

The Applied Linguistics Program offers an Ed.M. that requires 60 credits 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.

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

- A&HL 5085, Advanced syntax (3)
- A&HL 5575, Critical review of readings in ESOL/ applied linguistics (3)
- A&HL 6587, Seminar in second language acquisition (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
- Teaching English in diverse social/cultural contexts
- A&HL 5581, Psycholinguistic dimensions of SLA
- A&HL 5582, Sociolinguistic dimensions of SLA
- A&HL 5583, The social psychology of 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
- Second language literacy

Required courses out of program (3 courses of at least two points each, 6 points minimum):

Choose one from the following courses in statistics, measurement or research design:

- Introduction to measurement
- Basic concepts in statistics
- Methods of empirical research I
- Qualitative research methods for educators

Choose the other two in consultation an advisor.

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

Doctor of Education

The Applied Linguistics Program offers a 90-credit Ed.D. beyond the B.A. for students wishing to pursue empirical research in linguistic analysis, discourse analysis, sociolinguistic-

tics, cross-cultural pragmatics, language acquisition, language pedagogy and language testing and 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 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 a minimum number of points in their concentrations. 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 statistics or measurement.

Required Courses:

- HUDM 5021, Methods of empirical research I (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:

Students must also pass a doctoral research paper, a certification exam and a certification paper. They must also write a dissertation prospectus and a doctoral dissertation as evidence that they are able to carry out original research under the guidance of their doctoral committee.

To prepare for these requirements, students will need to take the following seminars:

- A&HL 5501, Research paper: Applied Linguistics (1–3) OR
- A&HL 5507, Research paper: TESOL/Applied linguistics/SLA (1–3)
- A&HL 6501, Doctoral seminar: Applied Linguistics (1–3) OR
- A&HL 6507, Doctoral seminar: TESOL/Applied linguistics/SLA (1–3)
- A&HL 7501, Dissertation seminar: Applied Linguistics (1–2) OR
- A&HL 7507, Dissertation seminar: TESOL/Applied linguistics/SLA (1–2)
- A&HL 8900, Dissertation advisement in language and literature (0)

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

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

General

*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, conversational analysis. Pedagogical implications.

A&HL 4003. **Schools of Linguistics** (3)

Dr. Horowitz/Dr. Williams. A comparative examination of major approaches to linguistic analysis, specifically systemic and transformational, with particular reference to pedagogical applications. Special fee: \$10.

A&HL 4005. **Semantic systems and the lexicon** (3)

Dr. Horowitz/Dr. Williams. A comparative examination of the semantic systems of English and other languages, with particular reference to the teaching and learning of vocabulary. Special fee: \$10.

A&HL 4008. **Interlanguage analysis** (3)

Faculty. Analysis of the processes of rule formation in second language acquisition, with focus on the classification and interpretation of learners' errors. Special fee: \$10.

*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)

Faculty. A systematic, in-depth examination of English grammar with particular reference to the teaching and learning of grammar.

A&HL 4087. **Introduction to second language acquisition** (3)

Faculty. 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. Special fee: \$20.

A&HL 4101. **Phonetics and phonology** (3)

Dr. Martin. A comparative examination of the sound system and orthographic system of English and other languages, with particu-

lar reference to problems of learning and teaching. Lab fee: \$25.

A&HL 4104. **Discourse analysis** (3)

Dr. Williams or Professor Purpura. Overview of diverse approaches to analyzing discourse: pragmatics, conversational analysis, interactional sociolinguistics, cohesion/coherence with reference to native and nonnative language acquisition and teaching. Materials fee: \$15.

A&HL 5085. **Advanced syntax** (3)

Dr. Williams. Prerequisite: A&HL 4085. Analysis of the more complex syntactic structures and semantic categories of English or other languages. Materials fee: \$10.

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 non-native 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.

Research Seminars

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 5581-A&HL 5589. **Topics in second language acquisition**

(Noncredit or 1–3 each course) Professor Beebe and staff. Prerequisite: A&HL 4087 or permission of instructor. An in-depth examination of various perspectives on

second-language acquisition. Materials fee: \$5 each course.

- A&HL 5581. **Psycholinguistic dimensions of SLA**
- A&HL 5582. **Sociolinguistic dimensions of 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 (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 topics such as cross-cultural pragmatics, pragmatic development, accommodation, stylistic variations, and language transfer.

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 sequence of seminars:
 - A&HL 5501. **Research paper in Applied Linguistics (1-3)**
 - A&HL 5507. **Research paper in Applied Linguistics/ TESOL (1-3)**
 - A&HL 6501. **Doctoral seminar in Applied Linguistics (1-3)**
 - A&HL 6507. **Doctoral seminar in Applied Linguistics/ TESOL (1-3)**
 - A&HL 7501. **Dissertation seminar in Applied Linguistics (1-2)**
 - A&HL 7507. **Dissertation seminar in Applied Linguistics/ TESOL (1-2)**

- A&HL 8901. **Dissertation advisement in Applied Linguistics (0)**
- A&HL 8907. **Dissertation advisement in Applied Linguistics/ TESOL (0)**

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

Independent Research, Fieldwork and Internships

- A&HL 4901. **Research and independent study in Applied Linguistics (1-6);**
- A&HL 4907. **Research and independent study in Applied Linguistics/ TESOL (1-6)** Permission required. To be taken under the direction of a faculty member. Students work individually or with others.
- A&HL 5201. **Fieldwork in Applied Linguistics (1-6);**
- A&HL 5207. **Fieldwork in Applied Linguistics/ TESOL (1-6)** 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.
- A&HL 6201. **Advanced fieldwork in Applied Linguistics (1-6);**
- A&HL 6207. **Advanced fieldwork in Applied Linguistics/ TESOL (1-6)** Permission required. See description for A&HL 5201/A&HL 5207.

See also:

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

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:

Educational Policy option available. 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 in History and Education prepares persons 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 in American and European educational history.

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 special concerns 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 12 of the points taken for the degree must be in the field of history and education, and at least three Teachers College courses must be taken outside the program.

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&HF 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&HF 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&HF 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&HF 5075. **Knowledge and human values** (2–3)
Faculty. Historical and philosophical perspectives on conceptions of

knowing, modes of consciousness, and educational aims in 19th and 20th century American thought.

*A&HF 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 inquiries on historical topics.

A&HF 6042. **Theories of history** (3)
Faculty. Permission required. Theories of historical knowledge and the historical process.

Advanced

*A&HF 5670. **Colloquium in history and education** (1–3)
Faculty. 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&HF 6574-A&HF 6575. **Seminar in the history of American education** (3)
Faculty. Permission required.

A&HF 6577. **Topics in the history of American educational thought** (3)
Faculty. Permission required. Prerequisite: A&HF 4070 or equivalent. Readings, discussions, and research in the intellectual history of American education.

Individualized Studies

A&HF 4901. **Research and Independent Study** (1–8) Permission required.

A&HF 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&HF 7500. **Dissertation seminar in philosophy and the social sciences** (0–3)
Permission required. Required of doctoral students in the semester following successful completion of certification examinations.

A&HF 8900. **Dissertation advisement in philosophy 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. degrees.

A&HF 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.

See also:

- A&HF 4603. **Human and social dimensions of peace** (1–2)
- A&HF 4611-A&HF 4614. **Education for peace, disarmament, and the control of nuclear weapon**
- A&HF 4611. **Security issues in the nuclear age** (1–3)
- A&HF 4613. **Fundamental concepts of peace education** (1–2)
- A&HF 4614. **The United Nations as peace educator** (2–3)
- A&HL 4042. **The History of American social thought** (3)
- A&H5500. **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.

Philosophy and Education

(Code: TFP)

Program Coordinator: Professor Christopher Higgins

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 M.A., Ed.M., and Ed.D. Undergraduate major in philosophy required for the Ph.D. Sample of philosophical writing required for Ed.M., Ed.D., Ph.D. applicants.

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, philosophical thinking about education.

Central questions guiding this philosophical exploration include:

- What are the ultimate purposes of an education?
- What ideals inform the educated person and society?
- How is the developing sense of selfhood connected to the ideals that orient one's conduct?
- What is the role of aesthetic experience in education—from art, literature and music to the experience of beauty in everyday life?
- How can education be a force for social reform?

Such philosophical study can illuminate a wide range of educational practices and issues. For example:

- The education of democratic citizens

- The role of critical thinking skills
- Multicultural and gender issues
- New roles for educational technology
- The professional ethics of teaching
- Moral and aesthetic education

The philosophy program provides an opportunity for educators to broaden and deepen their understanding of the processes and aims of education by mastering a spectrum of philosophical approaches, including those in the fields of moral philosophy and ethics, social and political philosophy, epistemology, aesthetics, 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 feminist theory and moral education, narrative and dialogical reasoning in education, democratic education from a Habermasian perspective, and African-American philosophies of education.

Degree requirements:

Master of Arts

The Master of Arts program is 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 philosophical interest (e.g., ethics, social philosophy, epistemology, etc.), to develop an area of educational interest (e.g., educational foundations, curriculum studies, theories of teaching and learning, etc.), or to generally broaden their professional education.

Doctoral Programs

The doctoral program in philosophy and education is flexible and responsive to individual student backgrounds, needs, interests, and career goals. Each student takes responsibility, in consultation with his or her adviser, for designing a course of study that will meet the general program requirements as well as the individual's professional goals.

At the center of that course of study are classes in philosophy and education. In addition to those major courses, some students use their electives to develop an expertise or "minor" in foundations of education, including history, psychology, sociology, or politics. Others may wish to develop a minor in educational studies related to their philosophical interests, such as curriculum development, approaches to teaching, or educational policy.

The Philosophy and Education program offers both the Doctor of Education (Ed.D.) and Doctor of Philosophy (Ph.D.) degrees. The Ed.D. requires a minimum of 90 points of credit, and offers a broad preparation for professional and academic responsibilities with emphasis on a particular area of education. The Ph.D. requires a minimum of 75 points, and emphasizes research and intensive specialization in a particular area of philosophy. *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&HF 4081. **Philosophies of education** (3)
Professor Arcilla. An introduction to philosophies of education from Plato to Dewey.

*A&HF 4084. **Social philosophy and education** (3)
Faculty. Major concepts in social philosophy and their application to educational issues.

*A&HF 4085. **The arts and American education** (3)
Faculty. A comparative study of responses by educators, literary artists, and painters to the American experience in the 19th and 20th centuries.

*A&HF 4086. **Aesthetics and education** (3)
Faculty. The relation of art and education, with attention to theories of the creative act, aesthetic experience, and the criteria governing criticism.

*A&HF 4180. **Education and the making of the modern self** (3)
Professor Arcilla. A critical study of modern philosophical and literary works on self-cultivation, and of their implications for education.

*A&HF 4181. **Critical theory and education** (3)
Professor Arcilla. An examination of key ideas and texts in the critical theory tradition of social philosophy, using them to illuminate humanistic issues in contemporary education.

*A&HF 4183. **Philosophies of multiculturalism and pluralism** (2-3)
Professor Higgins. An examination of the major historical and current American views of the nature and value of multiculturalism and of cultural pluralism, in education and in society more generally. Some attention to criticisms of multiculturalism.

*A&HF 4680. **Ethical issues in educational practice** (3)
Faculty. A study of how modern ethical theories illuminate ethical predicaments in education.

A&HF 5080. **Advanced topics in social and moral education and philosophy** (3)
Faculty. Close reading of important (mostly contemporary) philosophical texts on several topics relevant to education. Topics will vary and can include racism, cultural and moral relativism, morality, multiculturalism, and religion.

A&HF 5082. **The philosophy of John Dewey** (3)
Faculty. An analysis of the principal works of John Dewey on education.

*A&HF 5086. **Changing styles: philosophy, art and literature** (3)
Professor Broughton. An exploration of Western traditions of thought and practice with relation to the general problems of contemporary culture and the emerging demands of "cultural literacy" in a fragmented society.

A&HF 5680. **Colloquium in philosophy and education** (1-3)
Professors Arcilla, Broughton and Higgins. For majors only. A dissertation seminar and treatment of topics related to the development of competence in research and teaching philosophy of education.

A&HF 5681. **Colloquium in existentialism and education** (3)
Professor Arcilla. Permission required. A study of selected writings in existentialism and their implications for education.

*A&HF 6580. **Seminar in philosophy and education** (3)
Faculty. An advanced seminar. Permission required

Individualized Studies

A&HF 4901. **Research and independent study** (1-8)
Permission only.

A&HF 7500. **Dissertation seminar in philosophy and education** (0-3)
Faculty. Permission required. Required of doctoral students in the semester following successful completion of certification examination.

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

A&HF 6980. **Studies in philosophy and education** (1-6)
Faculty. Advanced students may register for intensive individual study of some aspect of their spe-

cialization. Registration is only by permission of a faculty member, 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.

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.

*A&HF4061. 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, psychoanalysis, ideology-critique, identity politics, feminism, queer theory.

*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, date-rape, demonism, guns and bombs, in reality, art, and fiction. Special fee: \$40.

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.

Religion and Education

(Code: TFU)

Program Coordinator: Dr. John Kuentzel

Program Advisors: Professor Douglas Sloan, Teachers College; 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.)

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 edu-

cational 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 cooperating institutions. Drawing on these combined resources each student's program is designed to meet his or her own particular objectives. All courses should be determined with the advice and approval of the student's advisor.

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&HF6581, 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&HF 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&HF 4901. **Research and independent study** (1-8)
Permission only.

A&HF 7500. **Dissertation seminar in religion** (0-3)
Faculty. Permission required. Required of doctoral students in the semester following successful completion of certification examinations.

A&HF 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&HF 6981. **Studies in religion and education** (1-6)

See Also:

- A&HF 4603. **Human and social dimensions of peace** (1-2)
- A&HF 4611-A&HF 4614. **Education for peace, disarmament, and the control of nuclear weapons**
- A&HF 4611. **Security issues in the nuclear age** (1-3)
- A&HF 4614. **The United Nations as peace educator** (2-3)
- A&H5500. **Pro-seminar in arts and humanities** (2)

Social Studies

(Code: TLW)

Program Coordinator: Professor Stephen J. Thornton

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.

Applicants to the Master of Arts degree program must have taken at least 30 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 Stephen J. Thornton, Box 80, Teachers College; telephone: (212) 678-3150.

Program Description:

The Social Studies Program combines history and the social sciences for purposes of instruction. To this end, social studies must maintain a balance between constancy to their parent disciplines and dedication to the oneness of learning.

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 in everything they do. These are the professionals who will lead the way in formulating and confronting the great educational questions of the day.

The program prepares students for professional positions in schools, colleges, universities, and allied institutions. Our fac-

ulty'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, of course, 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 (9 points minimum)

Required:

- A&HL4030, The study of history*
- A&HL4036, The teaching of social studies**

Take at least one of the following:

- A&HL5030, Diversity and the social studies curriculum***
- A&HL5035, History of the social studies since 1880
- A&HL5037, Alternative models of social studies curriculum

*Students who were undergraduate history majors may substitute A&HL5035 or A&HL5530, History of American social thought.

**Students who have taken an equivalent course should substitute A&HL5037

*** Students may substitute another Teachers College course that satisfies the "diversity" requirement with the consent of an advisor.

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:

Methods and Materials
(9–12 points)

Required:

- A&HL4030, The study of history*
- A&HL4036, The teaching of social studies
- A&HL5030, Diversity and the social studies curriculum**

Elective:

- A&HL5035, History of the social studies since 1880
- A&HL5037, Alternative models of social studies curriculum

*Students who were undergraduate history majors may substitute A&HL5035 or A&HL5530

**Students may substitute another Teachers College course that satisfies the “diversity” requirement with the consent of an advisor.

Social Studies Content Courses
(11–14 points)

Same as 32 point M.A. program. See above.

Student Teaching (10 points)

- A&HL4530, Seminar for student teachers in social studies*
- A&HL4730, 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&HL 4036, The Teaching of Social Studies; possibly A&HL 4030, The study of history, and A&HL 5030, Diversity and the social studies curriculum (or an approved substitute); and then, enroll for A&HL 4530, the Seminar for student teachers in social studies and A&HL 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-of-program courses may be used to satisfy points requirements in this area.

Required:

- A&HL4030, The study of history
- *A&HL4036, The teaching of social studies
- A&HL5035, History of the social studies since 1880
- A&HL5030, Diversity and the social studies curriculum

Suggested, consult an advisor:

- A&HL5037, Alternative models of social studies curriculum
- **A&HL5203, Fieldwork in social studies
- A&HL5223, Oral history as a multidisciplinary teaching tool
- A&HL 5232, Fieldwork in social studies teacher training.
- A*HL5530, The history of American social thought
- **A&HL5931, Guided investigations in the teaching of social studies
- **A&HL6530, Curriculum development, research, and supervision

*Students who have taken an equivalent course should substitute A&HL5037

**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&HL6030, 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)

Required:

Same as Ed.M. above

Suggested:

Consult an advisor:

Except for A&HL6530, 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&TY4051, Supervision for elementary and secondary schools
- A&HL6530, Curriculum development, research, and supervision

Suggested:

Consult an advisor

Internship in supervision (4–6 points over two terms)
• C&T6542, Internship program in supervision (in-service)

Guidance in development of integrative project (3 points)

- A&HL6030, 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&HL4030, The study of history*
- A&HL4036, The teaching of social studies (or equivalent)**
- A&HL4042, The history of American social thought
- A&HL5035, History of the social studies since 1880
- A&HL6500, Seminar in the history of the social studies

Suggested:

- A&HL5030, Diversity and the social studies curriculum
- A&HL5037, Alternative models of social studies curriculum
- A&HL5232, Fieldwork in social studies teacher training
- A&HL6500, Seminar in the history of the social studies

*Students who were history majors may substitute a more advanced course.

**Students who have taken an equivalent course should substitute A&HL5037.

Research courses, seminars and individualized work (15 points minimum)

Required:

- A&HL5503, Research paper in social studies
- A&HL6503, Doctoral seminar in social studies
- A&HL6530, Curriculum development, research, and supervision
- A&HL7503, Dissertation seminar in social studies

Suggested: Consult an advisor

Broad and basic areas of professional scholarship (15 points minimum)

Required:

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 subject 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* bul-

letin, 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)

Required:

- A&HL4030, The study of history*
- A&HL4036, The teaching of social studies**
- A&HL5530, The history of American social thought
- A&HL 5035, History of the social studies since 1880
- A&HL 6500, Seminar in the history of the social studies

Suggested:

- A&HL5232, Fieldwork in social studies teacher training

*Students who were history majors may substitute a more advanced course

**Students who have taken an equivalent course should substitute A&HL5037.

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&HF6041, Historical method
- A&HL6530, Curriculum development, research, and supervision

Altogether students must complete a minimum of 12 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)

Methods and Materials

*A&HL 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&HL 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&HL 4530. **Seminar for student teachers in social studies** (2)
Faculty. Must be taken concurrently with A&HL 4730. Special fee: \$20.

A&HL 4730. **Supervised student teaching in social studies** (3)
Professor Crocco and Faculty. Permission required. Must be taken concurrently with A&HL 4530. Special fee: \$20.

A&HL 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&HL 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&HL 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&HL 5037. **Alternative models of social studies curriculum** (3)
Faculty. Examination of alternatives to dominant approaches to social studies. Suitable for experienced teachers interested in advanced methodology.

A&HL 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&HL5035, which is ordinarily a prerequisite.

A&HL 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&HL 4032. **Problems in teaching world history** (2–3)
Faculty. Particular attention paid to problems of conceptualization and interpretation involved in organizing and teaching the course.

*A&HL 4033. **History of Europe since 1914: Selected topics** (3)
Professor Thornton. 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&HL 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&HL 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&HL 4038. **Problems in teaching American history** (2–3)
Faculty. Main themes in American history, selection, and interpretation; past and future of the survey course; its relation to textbooks, curriculum design, social science, and professional teaching.

*A&HL 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&HL 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.

*A&HL 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.

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&HL 5503, Research paper in Social Studies (1–3)
 - A&HL 6503, Doctoral seminar in Social Studies (1–3)
 - A&HL 6350, Curriculum development, research, and supervision (3)
 - A&HL 7503, Dissertation seminar in Social Studies (1–2)
 - A&HL 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&HL 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&HL 5203. **Fieldwork in social studies** (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.

A&HL 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&HL 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&HL 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&HL 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&HL 6030. Research in social studies education (1–3)

Faculty. Permission required.

A&HL 6203. Advanced fieldwork in social studies (1–6)

Faculty. Permission required. See description for A&HL 5203.

A&HL 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.

Program in History and Education:

A&HF 4070. History of education in the United States (3)

A&HF 6041. Historical method (3)

Columbia University's Graduate School of Arts and Sciences, for example: (three thousand level courses require approval of advisor and Registrar)

- Hist. W4674. **American urban history**
- Hist. W3005. **Main currents in African History**
- Hist. W3121. **America in the era of slavery and Jackson**
- Hist. W4010. **Roman imperialism**
- Hist. W4779. **Latin American civilization**
- Hist. W4825. **History of modern South Asia**
- Pol. Sci. G4461. **Latin American politics.**

Teaching of English

(Code: TLE)

Program Coordinator:
Professor Janet Miller

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. This program offers new and experienced educators opportunities for intensive study in disciplined-based content, integrated curriculum, critical lit-

eracies, and pedagogies for increasingly diverse student populations. 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 strongly advised.

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 strongly advised.

Program Description:

An English teacher creates contexts for reading, writing, 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.

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 design and implementation of curriculum, as well as diverse strategies and methods for the teaching of literature, writing, language 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, primarily 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.

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&HL4156, Writing: Non Fiction
- A&HL4157, Writing: Fiction
- A&HL4158, Writing: Poetry

Required literature courses:

Take at least one of the following:

- A&HL4050, The Study of Literature
- A&HL4051, American Literature
- A&HL4052, Adolescent Literature
- A&HL4053, African American Literature
- A&HL4056, Women Writers of the 20th Century
- A&HL4100, Contemporary Theater
- A&HL4561, American Short Story
- A&HL5151, Perspectives on Popular Texts

Required methods courses

(9 points minimum):

- A&HL4057, English Methods
- A&HL4058, Teaching of Reading
- A&HL4151, Teaching of Writing

Take at least one of the following:

- A&HL4155, Teaching Strategies

- A&HL4550, Teaching of Poetry
- A&HL4551, Teaching of Shakespeare
- A&HL5518, Diversity: Social and Cultural Contexts in the English Classroom

Required Student Teaching course work (8 points minimum):

- A&HL4750, Supervised Student Teaching of English Seminar*

*Students enroll in HL4750 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.

Required Foundations course work (6–9 points minimum):

Any three Teachers College courses that are NOT A&HL. 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&HL5590, Master's Seminar*

*Required by the College of all Master's pre-service students. Must be taken twice. The 32-point program should be distributed as follows:

Required writing courses:

Take at least one of the following:

- A&HL4156, Writing: Non Fiction
- A&HL4157, Writing: Fiction
- A&HL4158, Writing: Poetry

Required literature courses:

Take at least one of the following:

- A&HL4058, Teaching of Reading
- A&HL4050, The Study of Literature
- A&HL4051, American Literature
- A&HL4052, Adolescent Literature
- A&HL4053, African American Literature
- A&HL4056, Women Writers of the 20th Century
- A&HL4100, Contemporary Theater
- A&HL4561, American Short Story
- A&HL5151, Perspectives on Popular Texts

Required methods courses

(9 points minimum):

- A&HL4057, English Methods
- A&HL4058, Teaching of reading
- A&HL4151, Teaching of writing

Take at least one of the following:

- A&HL4155, Teaching Strategies
- A&HL4550, Teaching of Poetry
- A&HL4551, Teaching of Shakespeare
- A&HL5518, Diversity: Social and Cultural Contexts in the English Classroom

Required Foundations course work (6–9 points minimum):

Any three Teachers College courses that are NOT A&HL. 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&HL5590, Master's Seminar*
- *Required by the College of all Master's-level students.

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 literature, writing, language 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 in-service 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&HL5504).

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. One course should be taken from the research offerings in the English Education program:

- A&HL5149, Writing Research: Methods and Assumptions
- A&HL5150, Research in Practice

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&HL4050, The Study of Literature
- A&HL4051, American Literature
- A&HL4052, Adolescent Literature
- A&HL4053, African American Literature
- A&HL4056, Women Writer's in the 20th Century
- A&HL4057, English Methods
- A&HL4058, Teaching of Reading
- A&HL4100, Contemporary Theater
- A&HL4154, Rhetoric: Connecting Reading and Writing
- A&HL4155, Teaching Strategies
- A&HL4550, Teaching of Poetry
- A&HL4551, Teaching of Shakespeare
- A&HL4561, American Short Story
- A&HL4151, Teaching of Writing

Recommended courses at the 5000 and 6000 level (no more than 30 points):

- A&HL5149, Writing Research: Methods and Assumptions
- A&HL 5150, Research in Practice
- A&HL5151, Perspectives of Popular Literature in the English Classroom

- A&HL5504, Research Paper in the Teaching of English
- A&HL5514, Reader Response: Research, Theory, and Practice
- A&HL5518, Diversity: Social and Cultural Contexts in the English Classroom
- A&HL6011, The Politics of Teaching English
- A&HL6015, College Teaching of English
- A&HL6450, Internship in the Teaching of Writing
- A&HL6514, Postmodern Literary Theory: An Aesthetic Dimension

*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 area and question of inquiry and will include:

- a) an introduction that sets forth the student's orientation and interest in the topic of the thesis;
- b) a literature review that explores theoretical research and practical perspectives that relevantly bear on the thesis topic;
- c) a methodology section, explaining how and why data was collected, with whom, how it was analyzed and interpreted, and the role of the researcher therein;
- d) the results of the research;
- e) a concluding section that sets forth the relevance of this work for teachers within the fields of English Education, interdisciplinary, or literacy studies.

- A&HL5504, (1–3 points minimum.) Meets the special project requirement for all Ed.M. students and is the core course of the program. This course entails work on a major paper and research project that will form the basis for the Ed.M. thesis. This major paper (commonly referred to as the "5500" paper) involves students in synthesizing work in theory, research, and practice as related to the student's chosen area of inquiry.

Doctoral Programs

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. Teaching experience is required for admittance to both the Ed.D. and Ph.D. programs. 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 you will take also depends, in part, on the number of points you are able to transfer from your previous graduate work.

Students working toward a 90-point Ed.D degree are able to transfer a maximum of 36 points from previous graduate study. Ed.D. students will complete at least 54 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&HL6015, College Teaching of English*
- A&HL5504, Research Paper in the Teaching of English
- A&HL6504, Doctoral Seminar in the Teaching of English (continuous enrollment)
- A&HL7504, Dissertation Seminar in the Teaching of English
- A&HL8904, Dissertation Advisement in the Teaching of English

*For students seeking the Ed.D.C.T.

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&HL 4050. **The study of literature** (3)

Faculty. An examination of multiple approaches to reading traditional and contemporary texts using theory, criticism, and textual practices as tools and principles for teaching literature.

*A&HL 4051. **American literature: Critical approaches for the prospective teacher** (2–3)

Faculty. Literary selections are examined through various critical frameworks emphasizing the way texts are constructed and how readers negotiate meaning with texts.

A&HL 4052. **Adolescent literature** (3)

Faculty. An examination of contemporary young adult literature and traditional canonical texts. Discussions focus on issues of diversity, the urban experience, gender and the teaching of adolescent literature.

*A&HL 4053. **African-American literature** (3)

Faculty. Contemporary African-American literary selections are explored within a theoretical con-

text that emphasizes historical, cultural, political, and aesthetic dimensions of these texts.

***A&HL 4056. Women writers of the 20th century (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.

A&HL 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.

A&HL 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.

A&HL 4100. Contemporary theater (3)

Faculty. The role of drama in the classroom. Students will examine the role of theaters in the community, examining production, performance and the educative power of drama.

A&HL 4151. Teaching of writing (3)

Faculty. The course integrates theory and practice for teachers. Topics include the textual character of genres, critical perspectives on writing instruction, research on writing, evaluation and assessment of writing, and classroom methods for teaching writing. This course is taught with A&HL 4156, Writing: Nonfiction, as part of a 6 credit sequence.

A&HL 4154. Rhetoric: Connecting reading and writing (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.

A&HL 4155. Teaching strategies for 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.

A&HL 4156. Writing: Nonfiction (3)

Faculty. Participants write out of their own areas of expertise, drafting and revising articles for publication. This course is taught as part of 6 credit block with A&HL 4151. **Teaching of writing.**

A&HL 4157. Writing: Fiction and personal narrative (3)

Faculty. In a small, intensive setting, teachers write their own fiction and study models from current fiction. Write their own fiction and read contemporary fiction.

A&HL 4158. Writing: Poetry (3)

Faculty. A poetry writing class combined with close readings of selected contemporary poets.

A&HL 4550. Teaching of poetry (3)

Faculty. Experience in reading and writing poetry, designing curriculum, and determining effective teaching practices.

A&HL 4551. Teaching of Shakespeare (3)

Faculty. An examination of a sequence of Shakespeare plays, with emphasis on diverse theoretical perspectives and pedagogical principles for teaching Shakespeare.

***A&HL 4561. The American short story (3)**

Faculty. Explores the introduction of the contemporary short story to middle and high school students.

A&HL 4750. Supervised teaching of English (4)

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.

A&HL 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.

A&HL 5150. Research in practice (2)

Faculty. Examines the role of research facilitators in knowledge acquisitions/production, emphasizing the intellectual work of research as well as the social, cultural, and political implications of community-based research.

A&HL 5151. Perspectives on popular texts in English classrooms (3)

Faculty. This course unites post-structuralist literacy theory with cultural studies. Through a range of class activities and readings, the course will explore intersections between feminism, post-modern aesthetics, and popular literature.

A&HL 5153. Academic writing II (3)

See program in Applied Linguistics.

A&HL 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

A&HL 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.

A&HL 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 creat-

ing an academic, professional, and social network. Students research an area of special interest and share their findings.

A&HL 6011. The politics of teaching English (3)

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

A&HL 6015. College teaching of English (3)

Faculty. An examination of programs and methods of instruction in English courses on the college level.

A&HL 6514. Postmodern literary theory: The aesthetic dimension (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.

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 sequence of seminars:

- A&HL 5504. **Research paper in the Teaching of English program (1–3)**
- A&HL 6504. **Doctoral seminar in the Teaching of English Program (1–3)**
- A&HL 7504. **Dissertation seminar in the Teaching of English Program (1–2)**
- A&HL 8904. **Dissertation advisement in the Teaching of English program (0)**

Consult program advisor as to which course or courses you should enroll in during any particular semester.

Independent research, fieldwork and internships

A&HL 4904. Research and independent study in Teaching of English (1-6)

Permission required. Research and independent study under the direction of a faculty member. Students work individually or with others.

A&HL 5204. Fieldwork in Teaching of English (1-6)

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.

A&HL 6204. Advanced fieldwork in Teaching of English (1-6)

Permission required. See description for A&HL 5204.

A&HL 6404. Internship in college teaching of English (1-6)

Permission required. Opportunities to work in college programs. Students must inquire to see if opportunities are available during any given semester.

A&HL 6450. Internship in teaching writing (1-3)

A forum designed to offer students with a deep interest in the teaching of writing an opportunity to explore key issues in the field through their involvement with students, teachers, and classroom settings throughout the city or, for some students, tutoring work for the TC Writing Skills Center.

See also:

A&HT 5500. Pro-seminar in arts and humanities (1)

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.

Department of International and Transcultural Studies:

MSTU 4040. Computers and writing (3)

Teaching English to Speakers of Other Languages (TESOL)

(Code: TLZ)

Program Coordinator: Professor James Purpura

TESOL in Japan:

(Code: TLX)

Master of Arts (M.A.)

For those interested in the off-campus M.A. in Tokyo, contact: Terry Royce, Program Director Teachers College
Shinjuku Sane: Bldg 15F 1-22-2 Nishi Shinjuku, Shinjuku-ku Tokyo, Japan 160-0023
Fax 81 (3) 5323-70020

Degrees offered: (New York)

Master of Arts (M.A.)

Master of Education (Ed.M.)

Doctor of Education (Ed.D.)

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 either:

- submit a minimum score of 5 on the Test of Written English (TWE) in addition to the college-wide requirement of a minimum score of 600 on the TOEFL or a 250 on the computer-based equivalent, or
- submit a score of B or better on the Cambridge Certificate of Proficiency in English (CPE), or
- submit a score of 7.0 or better on the Cambridge International English Language Testing System (IELTS).

Non-native speakers of English must also submit either a score of 50 on the Test of Spoken English (TSE) 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.

M.A. applicants: Applications will be accepted for the fall, spring and summer, priority dates and at other times on a space available basis.

Ed.M./Ed.D. applicants: Applications will be accepted for the fall, spring and summer priority dates. Applicants must have an M.A. in TESOL, applied linguistics or related-field.

Ed.M.: Up to 30 points may be transferred from previous graduate study at an accredited institution, pending approval by a faculty adviser. Students who have already earned an M.A. from Teachers College may transfer only 15 points from outside. A writing sample is required.

Any application received after the priority deadline will NOT be reviewed.

Ed.D.: For students wishing to pursue empirical research. Up to 45 credit points may be transferred from previous graduate study at an accredited institution, pending faculty approval.

Program Description:

The TESOL program serves those who plan to teach English as a second or foreign language in the US or abroad, or who plan to do research on the teaching, learning or assessment of English as a second or foreign language. TESOL graduates typically teach in elementary or secondary schools, in universities or in English language institutes around the world. Some graduates teach ESOL for businesses or international organizations.

New York City provides one of the most diverse settings in the

world for teaching ESOL, and participants in the program make good use of the range of teaching situations in the city. In addition to the variety of settings where our students teach and observe, we sponsor the Community English Program for nonnative English speaking adults from the adjoining community. These classes are organized and taught by those enrolled in the TESOL program.

Ed.M. students combine both 4000- and 5000-level courses, while doctoral candidates make selections from all levels to round out their programs. The Ed.M. is designed to complement former professional training at the M.A. level and sometimes serves as an initial preparation for entering the doctoral program.

In addition, an off-campus M.A. in TESOL is offered in Tokyo for teachers of English in Japan.

Doctoral studies (Ed.D.) emphasize research, especially in the areas of second language acquisition and teaching. The doctoral program serves those interested in areas such as research, university teaching, teacher education, or curriculum development.

Degree Requirements:

Master of Arts

The TESOL program offers the following two tracks in the Master of Arts program:

The M.A. in TESOL (general track) offers a minimum of 36 points of graduate study.

Required courses in TESOL:

- A&HL4077, TESOL Classroom practices
- TESOL workshops (minimum of 3)
- Specialized practica (minimum of 2)

- A&HL4085, Pedagogical English grammar
- Phonetics and phonology
- A&HL4087, Introduction to second language acquisition
- A&HL4088, Second language assessment

Required courses outside the program (6–9 points). Chosen with advisor approval.

Elective courses in: Sociolinguistics and education, Semantic systems and the lexicon, Interlanguage analysis, Discourse analysis, Advanced English syntax, Trends in second language acquisition. (6 points)
Chosen with advisor approval.

In addition: Students in this M.A. program are required to complete a three part comprehensive exam consisting of two multiple choice sections and a final essay.

The M.A. in TESOL with Teacher Certification offers a minimum of 36 points of graduate study.

Required courses in TESOL:

- A&HL4077, TESOL classroom practices
- A&HL4076, TESOL methodologies for K–6
- A&HL4171, Language through the content areas for 7–12
- TESOL workshops (minimum of 3)
- Specialized practicum
- Supervised student teaching (1 semester K–6, 1 semester 7–12)
- Pedagogical English grammar
- Phonetics and phonology
- A&HL4087, Introduction to second language acquisition
- A&HL4088, Second language assessment

Required courses outside the program (6–9 points)

- Special education
- Bilingual education
- Multicultural education

Elective in: Sociolinguistics and education, Semantic systems and the lexicon, Interlanguage analysis, Discourse analysis, Schools of linguistics, Psycholinguistics, Advanced English syntax, Trends in second language acquisition. (3 points)
Chosen with advisor approval.

In addition: Students in this M.A. program are required to complete a three part comprehensive exam consisting of two multiple choice sections and a final essay.

Master of Education

The Ed.M. in TESOL offers a minimum of 60 points of graduate study. In order to ensure that Ed.M. students are well-rounded in the field of TESOL, they are required to take one or more courses in: teacher education, English language analysis, second language acquisition, sociolinguistics and second language assessment.

Required courses in TESOL:

- A&HL4077, TESOL classroom practices
- Specialized practicum
- A&HL4085, Pedagogical English grammar
- Phonetics and phonology
- A&HL4087, Introduction to second language acquisition
- A&HL4088, Second language assessment
- A&HL5577, Language teacher education programs
- Discourse analysis
- Semantic systems and the lexicon
- Sociolinguistics and education
- A&HL5575, Critical review of readings in ESOL and applied linguistics
- A&HL6587, Seminar in second language acquisition

Required courses outside the program (6–9 points). Chosen with advisor approval. At least one course must be in statistics, measurement and research design.

In addition: Students in the Ed.M. program are required to complete an integrative project.

Doctor of Education

The Ed.D. in TESOL offers a minimum of 90 points of graduate study. In order to ensure that Ed.D. students are well-rounded in the field of TESOL, they are required to take one or more courses in: teacher education, English language analysis, second language acquisition, sociolinguistics and second language assessment.

Required courses in TESOL research:

- A&HL6505, Doctoral seminar
- A&HL7505, Dissertation seminar
- A&HL8905, Dissertation advisement

Required courses in TESOL:

- A&HL4077, TESOL classroom practices
- Specialized practicum
- Pedagogical English grammar
- Phonetics and phonology
- A&HL4087, Introduction to second language acquisition
- A&HL4088, Second language assessment
- A&HL5577, Language teacher education programs
- Discourse analysis
- Semantic systems and the lexicon
- Sociolinguistics and education
- Critical review of readings in ESOL and applied linguistics
- A&HL6587, Seminar in second language acquisition

Required courses in TESOL concentration (at least 15 points): Chosen with advisor approval.

Required courses in statistics, measurement and research design (15 points). Chosen with advisor approval.

In addition: Students must complete a library research paper, certification exam, certi-

fication paper and dissertation prospectus before they begin writing their dissertation. *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)

Basic Courses

*A&HL 4076. **TESOL methodologies for K–6 (3)**

Dr. Levine. Introduction to activities, materials, and principles particularly suited to students in elementary and secondary schools. Special fee: \$10.

*A&HL 4077. **TESOL classroom practices (3)**

Faculty. Introduction to the major language teaching approaches that have been influential in the 20th century. Special fee: \$10.

*A&HL 4078. **TESOL materials (3)**

Faculty. Practice in characterizing and critiquing materials in use and determining their suitability for different settings.

*A&HL 4080. **Teaching in linguistically diverse classrooms (3)**

Ms. Dwyer. 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.

A&HL 4085. **Pedagogical English grammar (3)**

Faculty. An in-depth examination of English language grammar as it applies to language teaching and learning. Special fee: \$10.

A&HL 4086. **Observation (3)**

Faculty. Introduction to systematic observation of methods and other communications in classrooms and of a range of interactions outside of classrooms as well.

A&HL 4087. **Introduction to second language acquisition (3)**

Faculty. Prerequisite: A&HL 4085. Survey of models and basic princi-

ples of second language acquisition and examination of how language acquisition research can inform language teaching and learning. 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 and analysis; introduction to measurement concepts and basic statistics; use of the computer in language assessment. Special fee: \$20.

A&HL 4089. Teaching writing to ESL students (3)
Faculty. Teaching writing to ESL students, particularly for secondary, college and adult teachers. Theory and classroom practices integrated through readings, writing, discussion, and experiences.

A&HL 4160-A&HL 4180. Specialized TESOL methodology (Noncredit or 0-1 each course)
Faculty/Staff. Not all courses are offered each term or year. Selections are offered according to student interest and staff availability. Courses usually meet over 1 or 2 weekends.

- A&HL 4160. **The Silent Way**
- A&HL 4161. **Counseling Learning(c)/Community Language Learning**
- A&HL 4162. **Small group activities and Cooperative Learning**
- A&HL 4163. **Role playing**
- A&HL 4164. **English for specific purposes**
- A&HL 4165. **English for academic purposes**
- A&HL 4166. **Models of learning languages through the use of computers**
- A&HL 4167. **Learning from television, radio, video, and other media**
- A&HL 4168. **Culture and second language teaching**
- A&HL 4169. **Literature in the ESOL class**
- A&HL 4170. **Drill and practice**
- A&HL 4172. **Teaching English in non-English speaking countries**
- A&HL 4173. **The functional approach**

- A&HL 4174. **The grammatical approach**
- A&HL 4175. **Facilitating autonomy in language learning**
- A&HL 4176. **Listening**
- A&HL 4177. **Speaking**
- A&HL 4178. **Reading**
- A&HL 4179. **Writing**
- A&HL 4180. **Trends: New directions in ESOL**

A&HL 4171. Language through the content areas (3)
Ms. Dwyer. Teaching English to 7-12 students through content areas like science, math and social studies. Special fee: \$10.

***A&HL 4500. Advanced English language study (1-2)**
Faculty. Development of speaking, listening, reading, and writing skills for use in an academic setting; emphasis on composing and editing projects for previous and ongoing classes; discussion of cross-cultural topics. Topics and emphasis change each term. Course may be taken more than once. Ideal for nonnative writers of English or those wishing to develop their writing skills. Limit 1 point toward TESOL or Applied Linguistics degree. Special fee: \$10.

A&HL 4570. Classroom strategies for teaching language minority learners (0)
Ms. Dwyer. Introduction to accommodating language minority learners in mainstream classes. Required for supervised student teaching in Arts and Humanities.

A&HL 4817-A&HL 4819. Experiences in learning another language (Noncredit or 1 each course)
Faculty. Experience in learning to read, write, speak, and listen to a foreign language through a brief immersion; perspective on principles and methods from a learner's point of view. Method varies from term to term and the course may be taken more than once.

- A&HL 4817. **The Silent Way**
- A&HL 4818. **Counseling Learning/Community Language Learning**
- A&HL 4819. **Trends in language teaching**

A&HL 4860-A&HL 4880. Specialized materials (Noncredit or 0-1 each course)
Faculty/Staff. Not all courses are offered each term or year. Courses are offered according to student interest and staff availability. Courses usually meet over 1 or 2 weekends. The titles of the courses A&HL 4860-A&HL 4880 parallel those of courses A&HL 4160-A&HL 4180.

Advanced Courses

A&HL 5575. Critical review of current readings in ESOL and applied linguistics (3)
Professor Beebe. Sustained reading of professional journals and classic works in the field of language teaching and seminal works related to the field of ESOL, methods, second language acquisition, and bilingual education.

A&HL 5577. Language teacher education programs (3)
Faculty. Models, practices, and issues in teacher preparation and professional development, including supervision.

A&HL 5581-A&HL 5589. Topics in second language acquisition (3)
See Applied Linguistics program.

A&HL 6587. Seminar in second language acquisition (3)
Professor Beebe. Permission required. Prerequisite: A&HL 4087 or permission of instructor. An in-depth analysis of research on second-language acquisition, focusing on topics such as cross-cultural pragmatics, pragmatic development, accommodation, stylistic variations, and language transfer.

Practica

These practica are designed to enable degree candidates to translate their other course work into practice. The credit hours for practica do not accurately reflect the time commitment they each require. In addition to teaching from 6 to 12 clock hours per week, participants must set aside 2-3 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&HL 4776. Supervised student teaching in ESOL (3)
Faculty. Permission required. A supervised teaching experience for all those M.A. candidates who are interested in working for a New York State teaching certificate in ESOL N-12 (nursery School to 12th grade) and who have not taught ESOL in grades N-12 for at least two years, full time. During the terms of practice teaching, students are not permitted to hold full-time jobs. Course may be taken more than once.

A&HL 5360-A&HL 5379. Specialized practica for ESOL teachers (2 each course)
Faculty/Staff. A parallel course from A&HL 4160-A&HL 4180 and/or A&HL 4860-A&HL 4880 is required. For example, if a candidate wants to enroll in a practicum in role playing, A&HL 5363, then previous or concurrent registration of A&HL 4163 and/or A&HL 4863 is necessary. The titles of courses A&HL 5360-A&HL 5379 and A&HL 4860-A&HL 4879 parallel those of courses A&HL 4160-A&HL 4179. All practica are not offered each term or year. Courses are offered as a result of student interest and staff availability.

A&HL 5380. Specialized practica for ESOL teachers: in-service teaching (3)
Faculty. Permission required. A supervised student teaching experience for those M.A. candidates interested in a New York State teaching certificate in ESOL who are currently teaching full-time in the schools. Course may be taken more than once.

A&HL 6375. Professional development seminar in TESOL (3-9)
Faculty. Permission required. Participants relate their own teaching experiences to other courses they audit at the College. They develop projects related to their courses and readings but do not have to fulfill the requirements of other courses. Work can be done at Teachers College and in New York City or at one's own teaching site any place in the world.

Independent research, fieldwork and internships

A&HL 4095. Research in TESOL (1-6)

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 5205. Fieldwork in TESOL (1-6)

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 6205. Advanced fieldwork in TESOL (1-6)

Permission of instructor. See description for A&HL 5205. Course may be taken more than once.

A&HL 6405. Internship in college teaching in TESOL (1-6)

Permission of instructor. 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 may be taken more than once.

Doctoral preparation

Doctoral preparation involves three successive stages:

- Exposure to basic research methods
- Identification of dissertation topic
- Presentation of a prospectus

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

- A&HL 5505. **Research paper in the Teaching of English to Speakers of Other Languages (TESOL) program.** (1-3 each course)
- A&HL 6505. **Doctoral seminar in the Teaching of English to Speakers of Other Languages (TESOL) program.** (1-3 each course)
- A&HL 7505. **Dissertation seminar in the Teaching of English to Speakers of**

Other Languages (TESOL) program.

- A&HL 8905. **Dissertation advisement in the Teaching of English to Speakers of Other Languages (TESOL) program.** (0)

These seminars are ordinarily undertaken as soon as possible after completing the M.A. degree. The details of seminar organization vary considerably between programs. Consult your advisor as to which course or courses you should enroll in during any particular semester.

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 Spanish

(Code: TLS)

Program Coordinator: Professor Mordecai Rubin

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.)

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.

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 successfully completed the formal research paper (A&HL 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., 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 Teaching of Spanish 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 mini-courses 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 Poesía; 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.

- A&HL 4049, Spanish methods and class management
- A&HL 4069, Spanish pronunciation and intonation for teachers, and
- A&HL 5061, Advanced Spanish syntax

For teacher certification, A&HL 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, the student will be expected to include in 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 *tertulias* and other 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&HL 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&HL 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&HL 7506 which is the presentation and acceptance of the proposal (1–2 credits, P or F grade).

Following the semester of registration in A&HL 7506, the student must enroll in the non-credit A&HL 8906, Dissertation Advisement, in which continuous registration is gen-

erally 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:

- at least two courses in Higher Education (catalog 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
- at least one supervised semester of A&HL 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&HL 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&HL 4049. **Spanish methods and class management** (2)
Dr. Pujadas. A “hands-on”, practical survey of objectives, strengths and weaknesses of the principal approaches to foreign-language teaching since 1945. Special problems of multi-cultural settings will also be explored.

*A&HL 4060. **Conversational Spanish for urban communication** (Noncredit or 2–3)
Professor Rubin and Staff. Practical conversational Spanish taught by the direct method. Beginner, Intermediate and Advanced sections. Very limited use of books and assignments. Special fee: \$20. Noncredit fee: \$365.

*A&HL 4061. **Practical Spanish via distance learning** (Noncredit or 2–3)
Professor Rubin and staff. Permission required. Intermediate level. Students need a knowledge of pronunciation and elementary grammar; a computer is also needed. Noncredit fee \$495

A&HL 4069. **Spanish pronunciation and intonation for teachers** (3)
Professor Rubin. Required for the M.A. degree. Conducted in Spanish. Standard and regional Spanish phonology; contrasts with English; pedagogical problems.

*A&HL 4070. **Cultural traditions and achievements in Hispanic America** (2–3)
Professor Rubin. 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&HL 4072. **Humanities in the Hispanic world: Selected topics** (2–3)

Faculty. 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&HL 4760. **Supervised teaching of Spanish in secondary schools** (4)

Professor Rubin and staff. Generally taken in the final spring semester at both middle and high school levels. During the practice teaching period a coordinate seminar meets periodically at the College.

A&HL 5061. **Advanced Spanish syntax** (3)

Professor Rubin. Required for the M.A. degree. Conducted in Spanish. Intensive study of contemporary Spanish syntax; contrasts with English; pedagogical implications.

A&HL 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&HL 5064. **The teaching of Spanish literature** (3)

Professor Rubin. 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&HL 5070. **Stylistics and writing in Spanish** (3)

Faculty. Conducted in Spanish. Designed to upgrade writing skills as well as assist teachers in the teaching of composition in Spanish.

A&HL 5565. **Advanced seminar in historical Romance linguistics** (3)

Professor Rubin. 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&HL 5506. **Research paper in the Teaching of Spanish program** (1–3)
- A&HL 6506. **Doctoral seminar in the Teaching of Spanish Program** (1–3)
- A&HL 7506. **Dissertation seminar in the Teaching of Spanish Program** (1–2)
- A&HL 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&HL 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&HL 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&HL 6206. **Advanced fieldwork in Teaching of Spanish** (1–6)

Permission required. See description for A&HL 5206.

A&HL 6406. **Internship in college teaching of Spanish** (1–6)

Opportunities in teaching direct-method conversational Spanish and in projects in distance learning. Students must inquire to see if opportunities are available during any given semester.

See also:

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

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.

Chair: John H. Saxman
Location: 1159 Thorndike Hall
Telephone Number:
Department Secretary,
(212) 678-3895; Department
Chair, (212) 678-3892
Email: yew4@columbia.edu
(Department Secretary)
Email: jhs37@columbia.edu
(Department Chair)
Fax: (212) 678-8233

Programs:

Movement Sciences and
Education
Speech-Language Pathology
and Audiology

Faculty:

Professors:

Ronald DeMeersman
(Movement Sciences:
Applied Physiology)
Antoinette Gentile
(Movement Sciences: Motor
Learning and Control)
John H. Saxman (Speech-
Language Pathology)

Adjunct Professors:

Steven Heymsfield
(Movement Sciences:
Applied Physiology)
Lorraine Ramig (Speech-
Language Pathology)
Xavier Pi-Sunyer
(Movement Sciences:
Applied Physiology)
Richard Stein (Movement
Sciences: Applied
Physiology)

Associate Professors:

Andrew M. Gordon
(Movement Sciences: Motor
Learning and Control)
Honor O'Malley (Audiology)

Adjunct Associate Professors:

Sergei Yu Aleshinsky
(Movement Sciences:
Motor Learning)
Dympna Gallagher
(Movement Sciences:
Applied Physiology)
Judith Gravel (Audiology)
Terry Kaminski (Movement
Sciences: Motor Learning
and Control)
J. Joan Sheppard (Speech-
Language Pathology)
Patricia M. Sweeting (Speech-
Language Pathology)
Karen B. Wexler (Speech-
Language Pathology)

Assistant Professors:

Jason H. Mateika
(Movement Sciences:
Applied Physiology)

Adjunct Assistant Professors:

Mark Budde (Speech-Language
Pathology)
Roger A. Muzii (Movement
Sciences: Motor Learning
and Control)
Susan Goldfein (Speech-
Language Pathology)
Jacqueline Taubman (Speech
Language Pathology)

Instructors:

Cynthia S. Cohen (Speech-
Language Pathology)
Catherine Crowley,
Distinguished Practitioner
(Speech-Language
Pathology)
Julie Fineman (Movement
Sciences: Motor Learning
and Control)
Maria Grigos (Speech-
Language Pathology)
Carol M. Kaufman (Speech-
Language Pathology)
Iris A. Klatsky (Speech-
Language Pathology)
Sally McGoldrick (Movement
Sciences: Motor Learning
and Control)
Michael Soupios (Movement
Sciences: Motor Learning
and Control)
Carol Tompkins (Speech-
Language Pathology)

Clinical Staff:

Teresa R. Boemio (Audiology)
Laura Fitzpatrick (Speech-
Language Pathology)
Kathy Goodhart (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 Biobehav-
ioral Studies offers programs
which derive educational and
clinical applications from an
understanding of the biological
processes underlying human
communication, movement,
and their disorders. An under-
standing of the normal biobe-
havioral processes is applied to
clinical practice. The scientific
knowledge obtained from
studying each of these special-
ized 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 pro-
grams assume professional roles
in educational, health-related,
and community agency settings
as speech-language patholo-
gists, exercise physiologists, fit-
ness trainers, cardiac rehabilita-
tion therapists, occupational
therapists, and physical thera-
pists. As these professionals
often work in interdisciplinary
teams, the Department facili-
tates opportunities for students
to interact across professional
boundaries.

Our Doctoral graduates are pre-
pared for university faculty
positions, administrative posi-
tions in field-based settings, and
may also pursue careers in
research.

The Department maintains
clinics and laboratories to sup-
port 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, kinemat-
ics, 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 accred-
ited by the Professional Services
Board of ASHA.

Courses:

BBS 4043. **The human nervous
system** (3)
Faculty. Anatomy and basic physi-
ology of the central and peripheral
nervous systems. Reflex systems,
sensorimotor processes and the
special senses; introduction to neu-
ropathology and clinical neurology
as related to rehabilitation.

BBS 4050. **Applied biomedical
instrumentation** (3)
Faculty. Permission required. Elec-
tronic instrumentation for detec-
tion and characterization of physi-
ologic phenomena. Basic elements
of instrumentation arrays, includ-
ing transduction, signal condition-
ing, and output displays. Evalua-
tion of displacements, force EMG,
ECG, and ventilatory parameters.
Has special relevance to students
in motor learning and control, and
applied physiology.

BBS 5069. **Brain and behavior I:
Communication in the nervous
system** (1-2)
Professor Gentile. An introduction
to communication within the ner-
vous system and functional brain
neuroanatomy. Examination of
chemical circuits in brain and asso-
ciated pathologies, such as Parkin-
son's disease, Tourettes, schizo-
phrenia, depression and anxiety.

BBS 5069. Brain and behavior II: Perception, emotion memory and cognition (1-2)

Professor Gordon. 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)

Professor Mateika. 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 4032. Neuroscience of human speech and language (2)

Faculty. This course combines lectures and laboratory learning to provide an understanding of the neuroscience of human communication.

BBS 4065. Biological and behavioral basis of sleep (3)

Professor Mateika. This course is designed to introduce students to the biological and behavioral mechanisms responsible for sleep, dreaming, and attention. Lab fee: \$30.

BBS 6070. Neural basis of respiration (3)

Professor Mateika. 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 (2-3)

Program in Movement Sciences and Education

Applied Physiology

(Code: TRA)

Program Coordinators:
Professors DeMeersman and Mateika

Motor Learning and Control

(Code: TRM)

Program Coordinators:
Professors Gentile and Gordon

Physical Education

(Codes: TRP & TPC)

See offerings in the Department of Health and Behavior Studies.

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 neces-

sary). 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 TC. See offerings in Dept. of Health and Behavior Studies for a fuller description.

Each of these specialties has five components, including:

1. Substantive study of theory and research as embodied in lecture and laboratory courses.
2. Development of clinical or educational skills in laboratory and fieldwork courses.
3. Research training to enable students to read and interpret original research and to carry out educational, clinical or laboratory research.
4. Seminars to discuss theory and research, identification of research problems, and 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 Professors Gordon or Mateika. The M.A. program can be completed in 12–18 months of full-time study or two to three years of part-time study (depending on the student's other responsibilities).

Specific requirements for courses in the M.A. program, are:

- BBS 5068, Brain and Behavior I: Communication in the nervous system (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, field-work 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 5068, Brain and Behavior I: Communication in the nervous system (2)
- BBS 4060, Neuromuscular response and adaptation to exercise (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, field-work 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 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 5068, Brain and Behavior I: Communication in the nervous system (2)
- BBS 4060, Neuromuscular response and adaptation to exercise (2)
- BBSR 4095, Applied physiology I (3)
- BBSR 5095, Exercise and Health (3)
- BBSR 4065, Biological and behavioral basis of sleep (3)
- BBSR 4195, Applied physiology laboratory I (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 5034
- 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 advise-

ment, subsequently as collaborators, then progressing to a position as independent researchers.

Typically, the dissertation research is an extension of one or two prior studies. Often, research leading up to the dissertation is presented at national meetings or is published in professional journals.

In addition to substantive study and research preparation, students are expected to design an individual program representing their research area and professional concerns. Such preparation requires a significant commitment to graduate study. Doctoral students (and Ed.M. students planning to pursue the doctoral degree) are required to be engaged in research at least three days per week (on- or off-site) and be available for advisement at least two mornings or afternoons.

For the doctoral program with specialization in motor learning and control, specific course requirements (or equivalents transferred from prior graduate study) are:

- BBS 5068, Brain and Behavior I: Communication in the nervous system (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 non-credit)
- 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)

Mr. Soupios. 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)

Dr. Gallagher. 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)

Professor Mateika. 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. Application 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, physiology). 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)

Professor Mateika 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 techniques and concepts. Included are indirect calorimetry, spectrophotometry, vascular volume dynamics, autonomic reflexes, thermoregulation, noninvasive cardiac output, pulmonary 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)

Professor Mateika. 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 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: Professor Mateika
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.

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.

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; Dr. Sweeting-vocal tract function and dysfunction and life span development of speech processes; Professor Gow-fluency disorders and articulation/phonology disorder.

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, Physiologic phonetics (3)
- BBSQ 4031, Articulatory, vocal and auditory mechanism (3)
- BBS 4032, Neuroscience of human speech and language (2)
- 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 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 two semester series in Laboratory Methods and Instrumentation in Clinical Practice that is taken for 1 points. 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.

Master of Education in Audiology

This program requires previous completion of the professional master's degree. At Teachers College, the professional masters degree is the Master of Science. Programs are planned for individuals who desire preparation for advanced professional responsibilities. Goals of candidates for the degree may include concentrations in pediatric communicology, geriatric communicology, and supervision. Further details on the Ed.M. degree, including the satisfactory completion of an integrative research training paper, may be obtained by requesting the general statement on Ed.M. programs from the program office.

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 live-case 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)
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 immittance 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. Introduction to basic sign language and alternative and augmentative communication systems. Students informed on how to serve communicatively handicapped hearing impaired, emotionally disturbed, mentally retarded, and severely and profoundly involved individuals. Important to special educators, psychologists, occupational and physical therapists, and other health professionals.

BBSQ 4047. Early motor behaviors in children: Normal and abnormal (3)
Dr. Sheppard. Study of normal and abnormal development of sensory-motor speech processes and related oral motor behaviors; etiology, diagnosis, and management of pre-speech and eating pathologies in infants and severely handicapped individuals.

BBSQ 5041. School speech-language-hearing program (2)
Faculty. Prerequisite: BBSQ 4040 or equivalent. Organization and development; survey techniques, testing, reports, records, materials, equipment; relationship of the program to the classroom teacher and other personnel.

BBSQ 5042. Geriatric communication (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. Physiologic phonetics (3)
Faculty. Kinesiological 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. Articulatory, vocal, and auditory mechanisms (3)
Faculty. 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)
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 agespan 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. Tests and testing procedures in speech-language pathology (3)
Faculty. Permission required. Required of speech pathology majors. Prerequisite: an introductory course in speech pathology. Study of tests and testing procedures for evaluating articulation, phonation, resonance, fluency, and language.

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)
Dr. 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)
Faculty. 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)
Faculty. Prerequisite: an introductory course in speech pathology. Definition of language disorders and description of deviant language behavior for purposes of (1) identifying children with a language disorder and (2) planning goals of language learning.

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 (1)
Ms. Klatsky. Prerequisite: an introductory course in speech pathology. Survey of medicosurgical treatments for laryngeal carci-

noma. Analysis of physiologic, acoustic, and psychosocial aspects of alaryngeal speech. Study of therapeutic methods.

BBSQ 5120. Communication Disorders in Bilingual Children (3)
Ms. Crowley. This course focuses on the impact of multicultural perspectives in discourse and narrative styles, processes of second-language acquisition, and bilingual education in a communication disordered child. These factors and others will be intergrated in the development of appropriate intervention programs.

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 (3)
Ms. Boemio. 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 speech-language pathology (3)
Dr. 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)
Dr. Sweeting. Sections: (1) TBA. (2) TBA. (3) TBA. (4). Required of speech pathology majors. Prerequisites: BBSQ 5110 and BBSQ 5111. Observation and participation in methods of evaluation of individuals with speech and language disorders at the Edward D. Mysak Speech-Language and Hearing Center. Practice in report writing. Special fee: \$150.

BBSQ 5331-BBSQ 5339. Clinic practicum
Faculty. Therapeutic methods and practice in speech-language pathology.

BBSQ 5331-BBSQ 5332. Regular clinic (3)
Dr. 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 (0)
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 (0)
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. Pre- or 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)
Ms. Boemio. Practice in hearing screening, audiologic evaluation, hearing aid fittings and troubleshooting 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 (2)

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 impairment (children and adults) (3)

BBSQ 6515. Voice and its disorders (3)

BBSQ 6516. Fluency and its disorders (3)

BBSQ 6517. Neuropathology of speech (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 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) Faculty (4) Faculty. Permission required. Prerequisite: BBSQ 5941. Doctoral candidates are required to enroll in their advisor's section for both semesters. Opportunity to design and conduct pilot studies and projects.

BBSQ 7500. Dissertation seminar in speech-language pathology and audiology (2)

Professor Saxman and Faculty. Prerequisite: BBSQ 6941. Development of doctoral dissertations and projects and presentation of plans for approval. Doctoral candidates are required to enroll for one year and must begin the sequence in the Autumn term immediately following completion of BBSQ 6941.

BBSQ 8900. Dissertation advisement in speech-language pathology and audiology (0)

Faculty. Prerequisite: BBSQ 7500. Individual advisement on doctoral dissertations. Fee to equal 3 points at current tuition rate for each term. For requirements, see section in catalog on Continuous Registration for Ed.D./Ph.D. degrees.

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, developmentally 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: Robert T. Carter
Location: 428 Horace Mann
Telephone Number:
212-678-3257
Fax: 212-678-3275

Programs:

Psychological Counseling
Counseling Psychology
Clinical Psychology
Clinical Post-doctoral
Respecialization Program
Psychology in Education

Faculty:

Professors:

Judith Berman Brandenburg
(Counseling)
Robert T. Carter (Counseling)
Barry A. Farber (Clinical)
Leah Blumberg Lapidus
(Clinical)
Elizabeth Midlarsky (Clinical)
Rosalea A. Schonbar
(Clinical)—Emeritus

Associate Professors:

Madonna Constantine
(Counseling)
Patricia M. Raskin (Counseling)

Assistant Professors:

George Bonanno (Clinical)
Lisa Miller (Clinical)
Christine Yeh (Counseling)

Adjunct Professors:

James Fosshage (Clinical)
Samuel D. Johnson
(Counseling)
Jerome W. Koseff (Clinical)
Stephen Mitchell (Clinical)
Arnold W. Wolf (Counseling)

Visiting Adjunct Professors:

Jesse D. Geller (Clinical)

Adjunct Associate Professors:

Xavier Amador (Clinical)
Ghislaine Boulanger (Clinical)
Nurit N. Israeli (Counseling)
Nanette A. Kramer
(Counseling)
Laurence Lewis (Clinical)
Aracelia Pearson-Brok (Clinical)
Stephen Reisner (Clinical)

Adjunct Assistant Professors:

Adeyinka Akinsulure-Smith
(Counseling)
Jill Backfield (Clinical)
Donna Bender (Clinical)
Ann Fenichel (Counseling)
Lisa Kentgen (Clinical)
Michael J. Koski (Counseling)
Ruth Livingston (Clinical)
Samuel E. Menahem (Clinical)
Billie Pivnick (Clinical)
John Rosegrant (Clinical)
Hawthorne Smith (Counseling)

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: TBA

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) focus on the development of individuals and groups, their educations and careers, assets and strengths, the importance of person-envi-

ronment interactions, psychoeducation and preventive needs, as well as their pathologies

- 2) intervene in appropriate arenas through their commitment to education, evaluation, research, and program development
- 3) be self-aware and sensitive to social constructions, to issues related to identity group membership, and to participate in a variety of settings with diverse populations
- 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, masters 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, relevant to their special needs and career objectives. Depending on their areas of interest and levels of training, graduates have found employment in colleges, adult education centers, industry, various health centers, and community and government agencies.

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 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.

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 part-time 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 four years, including the equivalent of three 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 or its equivalent, Racism and Racial Identity in Psychology and Education, or Perspectives on Cross-cultural Counseling in Psychology, Racial Cultural Counseling Laboratory, and 1 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 (e.g. physiological psychology, comparative psychology, neuropsychology, sensation, psychopharmacology) c) the cognitive-affective bases of behavior (e.g., learning, memory perception, cognition, thinking, motivation, emotion d) the social bases of behavior

(e.g., social psychology, cultural, ethnic and group process, sex roles, organizational and systems theory), and e) individual behavior (e.g. personality theory, human development, individual differences, abnormal psychology); Intervention strategies and service delivery systems; 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, Principles and methods of counseling
- CCPJ 5062, Career counseling and development

- CCPJ 4560, Professional issues
- CCPJ 5361, Preparation for individual counseling and interviewing
- CCPJ 5025, Group counseling or an approved substitute
- CCPJ 5020, Racism and racial identity in psychology and education
- CCPJ 5164, Perspectives on cross-cultural counseling and psychology
- CCPJ 5165, Racial/cultural counseling laboratory

The courses for the broad and basic areas are:

- HUDM 5059, Psychological measurement
- HUDK 4022, Developmental psychology: Childhood
- HUDK 4023, Developmental psychology: Adolescence
- HUDK 4024, Developmental psychology: Adulthood and the Life Span.

The Clinical Psychology requirement may be met by one of the following four courses:

- CCPX 4030, Psychology of adjustment
- CCPX 4035, Personality and behavior change
- CCPX 5032, Personality and psychopathology
- CCPX 5034, Developmental psychopathology

The Research requirements may be met by taking one of the following two sequences:

- HUDM 4122, Probability and statistical inference and
- HUDM 5122, Applied regression analysis, or
- ORLJ 4009, Understanding behavioral research and
- HUDM 5021, Methods of empirical research I.

Students should register for the following courses to meet Fieldwork and Practicum requirements:

- CCPJ 5260, Fieldwork in Counseling and Rehabilitation

- CCPJ 5263, Supervised fieldwork in elementary school counseling
- CCPJ 5265, Supervised fieldwork in secondary school counseling
- CCPJ 5360, Practicum in educational and vocational appraisal in counseling

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 rehabilitation; 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. Students will be permitted to compensate for a grade lower than a B by completing another course in the same category as that in which the low grade was earned.

General Psychology requirements:

- HUDK 4029, Theories of human cognition and learning
- HUDK 5029, Personality development and socialization across the life span
- ORLJ 5540, Pro-seminar in social 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
- CPJ 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, Principles & methods of counseling
- CCPJ 5361 Preparation for individual counseling
- CCPJ 5062, Career counseling and development
- CCPJ 5360, Practicum in vocational appraisal and counseling
- CCPJ 5025, Group counseling or
- CCPJ 5362, Group Dynamics

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 5364, Advanced practicum in cross-cultural counseling and psychotherapy or
- CCPJ 6460 (Year Course), Internship (completed after the student has achieved an approved dissertation)
- CCPJ 6560, Advanced professional issues

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 passed a program certification comprehensive exam, an interdepartmental examination on research methods and design, and submitted a scholarly review of research on a psychological topic of particular interest to them. 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 described in a bulletin entitled *Continuous Enrollment and Post-Certification Examination Course Requirements* available in the Office of Doctoral Studies (153 Horace Mann). To avoid these penalties, the certification examination must be taken no later than the

semester following the one in which the number of points accumulated at Teachers College and elsewhere do not exceed the specified maximum, 75 for students in the Ph.D. 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 Ph.D. Handbook for further details.

Courses:

Courses at the 4000-level do not usually require permission of the instructor and are open to non-majors as well as majors. Many 5000-level courses are also open to non-majors with appropriate background; 6000-level courses are usually limited to majors with advanced standing in the program. See listings below for prerequisites and limitations on enrollment. In addition to the courses listed below, students should consult the offerings of other psychology programs in this catalog.

CCPJ 4061. **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** (2-3)

Faculty. Limiting aspects of the major physical and emotional disabilities. Understanding and using medical knowledge in rehabilitation counseling.

CCPJ 4064. **Principles and methods of psychological counseling** (3)

Professor Raskin. Approaches to appraisal and counseling; theories and research findings; procedures employed in 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: Cultural, familial, and intrapsychic factors** (2-3)

Emphasis on the cultural factors that influence the familial and intrapsychic issues of women. The integration of feminist, psychoanalytic, and family systems theories provides a framework for understanding the implications of women's development for counseling and psychotherapy. Class format includes lectures and small application/discussion groups. Special fee: \$50.

CCPJ 4160. **School Counseling for children and adolescents** (3)

Professor Yeh. 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** (2-3)

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 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, 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.

Section 2: 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. Constantine. General concepts of career development and methods of assessment in career coun-

seling. This course also highlights various issues related to the vocational 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. Family therapy: Theory and practice (3)

Dr. Israeli. Prerequisite: CCPJ 4064 or equivalent. 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 depres-

sion, and survey of interventions designed to address these problems.

CCPJ 5164. Perspectives on cross-cultural counseling and psychology (2–3)

Professor Carter. Introduces students to a range of approaches used in psychology and other disciplines for developing therapeutic intervention across racial and cultural groups.

CCPJ 5165. Racial-cultural counseling laboratory (4)

Professor Carter. Permission required. Prerequisites: CCPJ 4064, CCPJ 5361, CCPJ 5362 and CCPJ 5020 or CCPJ 5164. An advanced experiential course designed to increase awareness of, and sensitivity to cultural and ethnic factors in psychological counseling.

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:

HUDK 5122. **Psychological factors in later life (3)**

ITSL 5023. **Guidance techniques for the bilingual/bicultural child and family (3)**

Fieldwork and Internships

CCPJ 5260. Fieldwork in psychological counseling and rehabilitation (2–4)

Professor Carter (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, CCPJ 5362; and either HUDK 4022, HUDK 4023, or HUDK 4024; or approved substitutes. Supervised experience in various types of social agencies, rehabilitation agencies, vocational guidance 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. Special fee: \$20.

CCPJ 5263. Supervised fieldwork in elementary school counseling (2–4)

Professor Yeh. 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, HUDK 4023, or HUDK 4024 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)

Professor Yeh. 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 5362; and either HUDK 4022, HUDK 4023, or HUDK 4024; 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)

Professor Carter. (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)

Professor Constantine. Students will explore the functions of group counseling in meeting client needs. Emphasis will be placed on theory and principles of group process, and on the development of group skills through participation in class role-plays and in a group counseling experience. Attention to the practice of effective group leadership will also be addressed.

CCPJ 5360. Practicum in educational and vocational appraisal and 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, HUDK 4022 or HUDK 4023 or HUDK 4024 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 vocational counseling. Students work with clients of the Center for Psychological Services. Special fee: \$115.

CCPJ 5361. Preparation for individual counseling and interviewing (3)

Autumn: Ms. Horowitz; 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 5362. **Group dynamics: A systems perspective** (4)
Professor Noumair. Permission required. Enrollment limited. Special hours and dates. 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: \$65.

CCPJ 5363. **Practicum in educational, vocational, and personal counseling in school settings** (3)
Faculty. Permission required. Prerequisite: CCPJ 4064, CCPJ 5062, CCPJ 5361, CCPJ 5362, HUD M5059 and HUDK 4022 or 4023. Students take responsibility for counseling under supervision.

CCPJ 5364. **Advanced practicum in cross-cultural counseling and psychotherapy** (4)
Professor Carter and Dr. Johnson. Course will involve placement in a human service setting with individual supervisor and a weekly seminar. Prerequisites: CCPJ 4064, CCPJ 5062, CCPJ 5165, CCPJ 5360, CCPJ 5361, 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. Placement in a field-setting for clinical experience.

CCPJ 6360z. **Practice in psychological counseling** (4 points each for Autumn and Spring)
Professor Constantine (Coordinator) and Faculty. Required: written application by June 1 for the next academic year, permission of the instructor, and concurrent registration for CCPX 5630. For advanced doctoral candidates in counseling

psychology. Counseling of persons with personal, social, vocational, and educational problems; work under close supervision with adolescent and adult clients in the Center for Psychological Services. Students register for 4 points each term. Special fee: \$115 each semester.

CCPJ 6362. **Group practicum** (3)
Dr. Koski (Autumn) and Professor Noumair (Spring). 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. A small group training experience in which students alternate the co-leadership of a group composed of other students. Students receive faculty supervision and feedback of their videotaped work as co-leaders. Special fee: \$50.

CCPJ 6363. **Advanced Group practicum** (1-2)
TBA. Permission required. Prerequisites: CCPJ 5361, CCPJ 5362, and CCPJ 6362. Written application by midterm date of the preceding semester required. 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. Prerequisite: Completion of, or concurrent enrollment in, an advanced practicum. Experience in practicum 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 Carter. Required of and limited to doctoral candidates 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)
Professor Constantine and Professor Raskin. 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 curriculum. 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 Constantine
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. **Identity and intimacy** (2-3)
Professor Raskin.

CCPJ 7502. **Dissertation seminar** (1-3)
Permission required. Prerequisite: CCPJ 5560 and CCPJ 6572-CCPJ 6579. Development of doctoral dissertations and presentation of plans for approval. Registration limited to two terms. For requirements, see section in

catalog on Continuous Registration for Ed.D./Ph.D. degrees.

CCPJ 7572. **Advanced research practicum in counseling psychology** (0)
Permission required. Prerequisite: CCPJ 6572-79. This course is a continuation of CCPJ 6572-79 and is only open to students who have completed two semesters of the prerequisite.

Independent Study and Research

Students may register for intensive individual study of a topic of special interest. Registration in independent study is by permission of the instructor under whose guidance the work will be undertaken. Credit may range from 1 to 3 points each term except for CCPJ 8900 (Dissertation Advisement); and registration is not limited to one term. Hours for individual conferences are to be arranged.

CCPJ 4902. **Research and independent study in psychological counseling** (1-3 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

Program Coordinator and Director of Clinical Training:
Professor Barry A. Farber

Degrees Offered:

Doctor of Education (Ed.D.)—
currently not accepting students
Doctor of Philosophy (Ph.D.)
(Code: TXC)
Master of Science (M.S.) *en passant*
Post-doctoral Respecialization Certificate
(Code: TZH)

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 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 during the month of March. As a rule, no applicant will be accepted on the basis of written application alone. Applicants are interviewed by one student and one faculty member of the Admissions Committee. All material included in the admissions procedure is accorded professional confidentiality by the Committee. The fact that students submit their applications with this knowledge constitutes permission to have these materials read by both faculty and student members of the Committee.

Post-doctoral Respecialization Program is open to those with a doctoral degree in Psychology from a regionally accredited university. The deadline date for applications is June 15th.

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*. A postdoctoral respecialization program for qualified psychologists with doctorates in other areas is also offered.

In the doctoral program students are prepared for professional work in community agencies, hospitals, research

centers, colleges and universities, and independent practice. It is accredited by the American Psychological Association. Completing a 100-point doctoral degree, including an internship, typically takes five to seven years. Practicum work is done in the Teachers College Center for Educational and Psychological Services (Director: Dr. Dinalia Rosa). Clinical supervision is offered by full-time and adjunct faculty and staff.

The doctoral program has been continuously accredited by the American Psychological Association since accreditation was initiated in 1948. 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 articles).

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 in-house clinic (The Center for Educational and Psychological Services) with several other College programs. All clinical psychology doctoral students are staff members in the Center after their first semester in the Program, and carry a regular caseload of clients. The Center sponsors a weekly case conference, at which students present and discuss cases. Clinical work is supervised by core faculty members or by adjunct faculty who are psychologists in private practice in New York. Students usually carry four clients as part of their psychotherapy practicum and receive two hours of supervision each week with two different supervisors.

The Clinical Psychology Program also offers a Postdoctoral Respecialization Program for psychologists with doctoral degrees in other areas of psychology. The Respecialization Program requires two years of

academic work and practica followed by a one-year internship. Fulfillment of all requirements results in a certificate of completion.

Degree Requirements:

Doctor of Philosophy

(Code: TXC)

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;
3. An original piece of empirical research, which also serves as a qualifying paper, to be completed during the second year of study;
4. A passing grade on the certification examination (on Research Methods) during the third year of study;
5. 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; Personality and Psychopathology; Psychological Measurement; Applied Regression Analysis; Research Methods; Developmental Psychopathology; and Dynamic Approaches to Psychotherapy. Students also take psychological testing, a course in clinical interviewing and a practicum in psychological assessment. Many students begin working with faculty members on research during this first year.

Second Year

During their second year, students' didactic courses include: Research Methods (II); Experimental Design; Empirical Bases of Psychotherapy; Psychotherapy with Children; DSM-IV; History and Systems; and the Evolution of Freud's Psychological Theories. 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, Cognitive Behavioral and Interpersonal Psychotherapies, Transference and Countertransference, Empirical Bases of Psychotherapy; and Dissertation Seminar. There is also a full year clinical practicum.

Fourth 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 child-track or neuropsychology-track take additional didactic courses and practica. Elective courses for all students include Short-term Dynamic Psychotherapy, Forensic Psychology, Object Relations, Self Psychology, Working with Children-At-Risk, 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

Post-doctoral Respecialization

(Code: TZH)

Individual courses of study are determined in consultation with the student's academic advisor within the context of the candidate's previous education. Since APA mandates that respecialization programs be equivalent to those of predoctoral students except for those courses or areas already studied at the graduate level, postdoctoral students' programs will likely include:

- Course work in clinical theory and practice, psychopathology, assessment, and professional ethics and standards;
- Practica in psychological assessment and intervention, including an externship when possible, and an internship;
- Course work in areas of general psychology and/or research in which the candidate has a deficiency;
- Electives in related fields of psychology.

Coordinator: Professor Schonbar

Financial Aid (Doctoral Program)

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 20% of the cost of a year's tuition. Most students also work part-time to cover expenses. Students who anticipate needing financial assistance must submit financial aid forms to the College by January 15th.

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: "Ourselves, our Bodies: Conflating the Psychical with the Physical in the Context of Dilencing the Self, Perfectionism, and Gender Role" (Sponsor: Barry Farber); "Gender Differences in Object Relations & Defensive Style" (Sponsor: Barry Farber); "The Influence of Casual Attributions of the Psychological Adjustment of Post-treatment Adolescent Cancer Survivors" (Sponsor: Barry Farber); "General Family Functioning, Parental Bonding, and Attachment Style: Familial Factors Influencing Severity and Type of Symptomatology in Adult Women who Report Childhood Sexual Abuse and Non-Abused Psychiatric Out-Patients" (Sponsor: Leah Blumberg Lapidus); "The Relationships Among Acculturation Style, Family Dynamics, and Adolescent Psychopathology and Competence in Immigrant and Non-Immigrant Dominicans" (Sponsor: Leah Blumberg Lapidus); "Social Support and Psychological Distress in Late Life: The Moderating Effects of Perceived Control and Attachment" (Sponsor: Elizabeth Midlarsky); "An Investigation of Consulting between Clergy and

Mental Health Professionals: A Cross-Sectional Survey of Rabbin and Psychologists: (Sponsor: Elizabeth Midlarsky); "The Well-being of Daughters Caring for their Elderly Mothers: The Role of Attachment Style and Relationship Quality" (Sponsor: Elizabeth Medlarsky) "A Prospective Study of Medication Compliance in Out-patients with Schizophrenia: The Relevance of Health Beliefs" (Xavier Amador).

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. Derby. 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 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 4125. Women and mental health (3)
Dr. Bender. Stressors, manifestations, and treatment of psychopathology in women; theories of Klein, Horney, Thompson, and others.

CCPX 4150. Introduction to forensic psychology (3)
Professor Lapidus. 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 5022. Emotions & health in psychological practice (3)
Professor Bonanno. This course will cover the impact of overwhelming emotions on human

health and self-regulatory responses. The role of culture in these responses will be explored, as well as historical context and theoretical perspectives.

CCPX 5030. Ethical and professional issues in clinical psychology (1)
Professor Schonbar. 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) 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 5102. Research in psychopathology, diagnosis, and legal applications of DSM IV (3)
Dr. Amador.(Autumn); Professor Lapidus (Spring). Experimental research in psychopathology and legal diagnosis: empirical studies and applications of multiaxial diagnosis. Understanding and use of *The Diagnostic and Statistical Manual of Mental Disorders* (4th edition).

CCPX 5230. Fieldwork in clinical psychology (1)Autumn, (0) Spring
Supervised practice in field placements. Sections: (1) Adult Externship (Professor Midlarsky). (2) Child Externship (Professor Miller).

CCPX 5330. Principles and techniques of clinical assessment (3)

Professor Lapidus. Doctoral candidates in clinical, counseling, and school psychology. Theory and practice of assessing individual personality functioning and styles of adjustment through observation, interview, and diagnostic instruments. Course requirements include a laboratory experience. Special fee: \$150.

CCPX 5333. Practicum in clinical assessment (1 for Spring and 0-1 for Summer)

Professor Lapidus. Permission required. Supervised practice in assessment as staff members of the Center for Psychological Services. Special fee: \$115; \$45 for Summer.

CCPX 5334. Clinical assessment and research with children and adolescents (3)

Dr. Kentgen. 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. Rosegrant. 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 (3)

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)
Fall. Dr. Amador Spring. Professor Bonanno. 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 Lapidus. 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 (2-3)

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)

Professor Midlarsky. Exploration of research and theory emerging from the interface of social and clinical psychology. Topics include helping, help-seeking, gender roles, aging and mental health, AIDS, and stress coping.

CCPX 5610. Clinical psychology colloquium (0)

Professor Farber (Coordinator), Clinical faculty and guest speakers. Permission required.

CCPX 5630. Case conference (0)

TBA. (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)

Professor Midlarsky. 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)

Professor Lapidus. 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: \$115 each semester; \$45 for Summer.

CCPX 6336. Advanced practicum in clinical intervention (3-4; 0-2 during Summer)

Professor Bonanno. Permission required. Prerequisite: CCPX 6335. For third-year doctoral students in clinical psychology. Special fee: \$115 each semester; \$45 for Summer.

CCPX 6338. Fourth-year practicum in clinical intervention (1)

Professor Schonbar. Permission required. Prerequisite: CCPX 6336. For fourth-year students in clinical psychology, two semesters, 1 point each semester. Special fee: \$30 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. Lewis. 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. Personality assessment: Projective tests, self-report measures and structured interviews (2)

Faculty. Permission required. Prerequisites: CCPX 5330, CCPX 5331. Emphasis on the Exner system of Rorschach scoring and interpretation, on self-report measures (e.g., MMPI), and on structured clinical interviews.

CCPX 6532-CCPX 6533. Advanced topics in clinical theory, research, and practice (2-3)

Clinical Faculty and Invited Instructors (including Dr. S. Mitchell and Dr. J. Fosshage). 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)

TBA. 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 6536. Postdoctoral seminar in clinical psychology (3)

Professor Schonbar. Emphasis on the relationship between newly acquired knowledge of clinical theory and technique and the students' previously acquired research competence and interests.

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)

Fall: Professor Farber. *Spring:* Dr. Amador. 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

Degrees Offered:

Two Tracks:

Master of Arts in Psychology in Education: Applied Psychology (Code: TXA)

Master of Arts in Psychology in Education: 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 Psychology in Education program offers two tracks from which students can choose: Applied Psychology (TXA) and General Psychology (TXG).

Applied Psychology psychologists are engaged in solving a wide range of practical problems, such as those associated with growth, adjustment and aging. In addition, they seek to remediate problem behaviors in individuals, and improve mental health care in diverse populations and communities. The program provides students with the foundation of knowledge in psychology that will help them make valuable contributions to the field.

The General Psychology track is designed to provide students with a general introduction to the field, which is a “next step” after college graduation for many students. The Applied Psychology track is specifically designed to give students a foundation for a masters level practice, or for additional graduate work in mental health. It includes clinical course work and opportunities to gain experience in relevant field work and research, both inside and outside the classroom.

With a Master of Arts degree, graduates can find employment in clinics, hospitals and research centers. Through their interaction with faculty and doctoral students 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 masters' 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 which include a special project, fieldwork and research. The program is built around an 18-credit core of courses. Degree requirements may be completed on a full-time basis in an academic or calendar year (two semesters), or its equivalent in part-time study. The Applied Psychology track is administered and taught primarily by Clinical Psychology faculty.

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 also is required. This program may be completed in an academic or calendar year (two semesters).

Students from both tracks should meet with the program coordinator at registration time to finalize course selections.

The basic curriculum for M.A. students includes:

Required courses (total of six) offered in the Fall:

- CCPX 4000, Introduction to Applied Psychology (3)
- CCPX 4150, Introduction to Forensic Psychology (3)
- CCPX 5032, Personality and Psychopathology (3)

Required courses offered in the Spring:

- CCPX 4010, Psychological Perspectives on Critical Social Problems (3)
- CCPX 5544, Cross-Cultural Issues in Psychopathology and Coping (3)
- CCPX 5102, Research in Psychopathology, Diagnosis, and Legal Applications (3)

Suggested Electives:

Three of the elective courses must be non-CCPX courses to meet the College's foundations requirement. The following courses meet that requirement:

- HUDM 4120, Basic Concepts in Statistics (3), or HUDM 4122, Probability and Statistics (3)
- HUDM 4050, Introduction to Measurement (2–3)
- HBSK 5033, Human Clinical Neuropsychology (3)
- HUDK 4120, The Empirical Study of Human Development (3)

CCPX electives should be chosen from the following list:

- CCPX 4032, Assessment and treatment of alcohol and chemical dependency (3)
- CCPX 4035, Personality and Behavior Change (3)
- CCPX 4120, Psychotherapy through Film and Fiction (3)
- CCPX 4125, Women and Mental Health (3)
- CCPX 4230, Fieldwork in Clinical Psychology (3)
- CCPX 4546, Research Perspectives on Critical Social Problems (3)
- CCPX 4900, Research and Independent Study: Clinical Psychology (3)
- CCPX 5039, Empirical Bases of Psychotherapy (3)
- CCPX 5531, Psychotherapy with Children (3)
- CCPX 5532, Clinical Issues: Children from Diverse Backgrounds (3)

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 Disabilities
Reading and Learning Disabilities (Offered jointly with the Department of Health and Behavior Studies)

Faculty:

Professors:

Jeanne Brooks-Gunn
Lucy McCormick Calkins
Celia Genishi
Sharon Lynn Kagan
D. Kim Reid
Betty Lou Whitford
Leslie R. Williams
Karen Zumwalt

Adjunct Professor:

Beatrice Fennimore

Associate Professors:

James H. Borland
A. Lin Goodwin
Barbara Kiefer
Nancy Lesko
Susan Recchia (on sabbatical AY 2000–2001)
Frances Schoonmaker
Marjorie Siegel

Adjunct Associate Professors:

Joann Jacullo-Noto
Lisa Wright

Assistant Professors:

Michelle Knight
Celia Oyler

Adjunct Assistant Professors:

Toni Bernard
Judith Birsh
Gloria Farber
Stephen Farenga

Valerie Henning-Piedmonte
Janet Hoffman
Brian Kaplan
Nancy Kunz
Lori Langer de Ramirez
Jed Luchow
Eileen Marzola
Judy Randi
Kathryn Sood
Robert Southworth

Lecturers:

Anne Sabatini
Valerie Bang-Jensen
Alison Rutter

Instructors:

Megan Blumenriech
Robert Cunningham
Tricia Gallagher-Guertsen
Tricia Giovacco-Johnson
John Gray
Djanna Hill
Timothy Jester
Linda Kasarjian
Robert Lane
Julie Leopold
Carrie Lobman
Robert Newton
Aki Ohseki
Carol Prendergast
Mary Rowe
Theresa Ruyter
Michelle Yang
Jan Valle

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 disabilities, 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 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 practice. 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 disabilities
 - gifted education
- Director of:
 - child-care center
 - 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
 - elementary or secondary education
 - learning disabilities
 - 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 non-school agency.

Preservice teacher education programs 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 Masters 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 Special Education, Elementary/Childhood Education, Gifted Education, or Learning Disabilities. The M.A. programs in Early Childhood Special Education, Elementary/Childhood Education, and Learning Disabilities are registered with the State of New York, and graduates of these programs are recommended for certification in their respective fields. Preservice graduates of the M.A. program in Gifted Education can become certified by applying for certification directly to the State Education Department.

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 Education, Early Childhood Special Education, Elementary/Childhood Education, Gifted Education, or Learning Disabilities. Graduates of inservice M.A. programs can become permanently certified by applying for permanent certification directly to the State Education Department.

There are currently eight M.A. programs in the Department of Curriculum and Teaching.

Master of Education

The Master of Education degree (Ed.M.) within the Department of Curriculum and Teaching affords students the opportunity to develop an area of expertise beyond that required for classroom teaching. The degree comprises 60 points. 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 nine 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 Admissions Office or from the Department of Curriculum and Teaching.

The concentrations within the Ed.D. program are:

- Curriculum and Teaching: Theory, Research, and Practice
- Early Childhood Education—(*specialization*)
- Early Childhood Special Education
- Educational Leadership: Teacher Education/Supervision/Staff Development
- Gifted Education
- Learning Disabilities
- Reading and Language Arts
- Religious 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 doctoral-level 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 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.

Curriculum and Teaching

(Code: TYZ)

Program Coordinators: Professors Borland, Calkins, Kiefer, Knight, Lesko, Siegel, and Whitford

Degrees Offered:

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

Special Application

Requirements/Information:

For Inservice M.A. admission, please submit a resume and proof of early childhood, elementary or secondary school teacher certification (provisional or permanent) or proof that you have completed an accredited Elementary, Early Childhood or Secondary teacher preparation/student teaching program. (For admission requirements for the Preservice M.A., see p. 164)

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.

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 GRE or Miller Analogy 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 once per year. The application deadline is**

January 2nd. Applications received after January 2nd will be evaluated in the following year.

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) have a minimum of one year's head teaching experience (which must be assessed and approved by faculty).

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. (See above for areas of concentration within this program.)

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 Masters 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, Cognitive curriculum in early childhood education.
- 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, Basic course in theory of curriculum design
- 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 point)
- C&T 4502, Master's project (1 point)
- 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 points)

The basic curriculum for M.A. students with a concentration in Elementary/Secondary (TYZT) includes:

- At least one of the following: C&T 4130, Current issues in elementary education (3 points), or C&T 4145, The education of youth and adolescents (3 points)
- At least one of the following: C&T 4020, The environments of school (2–3 points), or C&T 4118, Theoretical foundations of childhood education (2–3 points), or C&T 5036, Child and Family Policy (2–3 points)

Department requirements:

- C&T 4501, Teacher education lectures (1 point)
- C&T 4502, Master's project (1 point)
- 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 points)

The basic curriculum for M.A. students with a concentration in Reading/Writing (TYZL) includes:

- C&T 4138, Literacy instruction in the early and middle years (6 points)
- C&T 4151, The teaching of writing (3 points)
- C&T 4140, Literature for younger children (2–3 points) or C&T 4141, Literature for older children (2–3 points) or another course in children's literature.
- Depending on grade level focus and area of interest, choose from: C&T 4835, C&T 5037, 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 points), C&T 4130, Current issues in elementary education (3 points), or C&T 4145, The education of youth and adolescents (3 points)

Department requirements:

- C&T 4501, Teacher education lectures (1 point)
- C&T 4502, Master's project (1 point)
- 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 points)

Master of Education

The basic curriculum for Ed.M. students includes:

Core:

- C&T 4002, Basic course in theory of curriculum design (3 points)
- C&T 4004, Basic course in school improvement (3 points)
- C&T 4005, Principles of teaching and learning (3 points)
- Practical Curriculum Design Course (at least one) of the following: C&T 4052, Designing curriculum and instruction (2–3 points), C&T 4023, Differentiated curriculum for the gifted-talented (2–3 points), C&T 5114, Cognitive curriculum in early childhood education (3 points), or MSTU4083, Instructional technology & media systems (3 points).
- One course in social-historical foundations of curriculum and teaching. Choose from: C&T 4118, Theoretical foundations of childhood education (2–3 points), C&T 5036, Child and Family Policy (2–3 points), C&T 4020, The environments of school (2–3 points), C&T 5074, Curriculum and teaching policy (3 points).
- 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 points), HUDM 5122, Applied Regression Analysis (3 points), C&T 7500, Dissertation Seminar in Curriculum and Teaching (3

points), C&T 7501 Dissertation Seminar in Curriculum and Teaching (3 points), plus one additional course in research methods (2–3 points).

Other courses are selected in consultation with an advisor.

Concentrations include:

- Curriculum and Teaching: Theory, Research, and Practice
- Early Childhood Education
- Early Childhood Special Education
- Educational Leadership: Teacher Education/Supervision/Staff Development
- Gifted Education
- Learning Disabilities
- Reading and Language Arts
- Religious Education
- Urban Education

Early Childhood Education

(Code: TYD)

Program Coordinators: Professors Genishi, Kagan, and Williams

Degrees Offered:

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

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; and (3) to investigate historical, current, and projected issues central to early childhood education.

The Master of Arts program in Early Childhood is an inservice program, primarily for people already certified (or provisionally certified) to teach. Consideration may also be given to applicants whose training and experience are in closely allied professional fields, but they may have to take additional credits to meet the requirements for the M.A.

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 childhood 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.

At the doctoral level, the concentration in Early Childhood Education prepares candidates for college teaching, research, 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.

Degree Requirements:

Master of Arts

The basic curriculum for M.A. students includes:

Core:

- C&T 4113, Early childhood methods and programs (3 points)
- C&T 4118, Theoretical foundations of childhood education (2–3 points)
- C&T 5321, Practicum in early childhood education (3–4 points)
- A minimum of 12 points within the department

- A minimum of 18 points related to early childhood
- At least 3 courses outside the department for at least 2 points each
- Master's project (0 points)

Master of Education

The basic curriculum for Ed.M. students includes:

Core:

- C&T 4002, Basic course in theory of curriculum design (3 points)
- C&T 4004, Basic course in school improvement (3 points)
- C&T 4005, Principles of teaching and learning (3 points)
- C&T 5513, Seminar in early childhood education (3 points)
- C&T 5514, Seminar in early childhood education (3 points) or C&T 5036, Child and Family Policy (2–3 points)

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 points), HUDM 5122, Applied Regression Analysis (3 points), C&T 7500, Dissertation Seminar in Curriculum and Teaching (3 points), C&T 7501 Dissertation Seminar in Curriculum and Teaching (3 points), plus one additional course in research methods (2–3 points).

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.), available through Curriculum and Teaching (Code:TYZ)

Program Description:

Early Childhood Special Education is a rapidly expanding field providing early intervention and educational services to infants, toddlers, and preschool children with disabilities (including those at-risk for developing disabilities) and their families in home, hospital, and center-based 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 (19–23 points):

- C&T 4080, Normal and atypical development in young children (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 4302, Supervised practicum in the assessment of young children with exceptionalities or HBSE 4300, Supervised practicum in the educational assessment of exceptional children (2–3)
- 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)
- C&T 5114, Cognitive curriculum in early childhood education (3), or C&T 4052, Designing curriculum and instruction (2–3)

Special Education Focus (6–9 points):

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 points):

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 devel-

opment, 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 points), HUDM 5122, Applied Regression Analysis (3 points), C&T 7500, Dissertation Seminar in Curriculum and Teaching (3 points), C&T 7501 Dissertation Seminar in Curriculum and Teaching (3 points), plus one additional course in research methods (2–3 points).

Other courses are selected in consultation with an advisor.

Elementary/Childhood Education-Preservice

(Code: TYP)

Program Coordinators:
Professors Goodwin, Oyler,
and Schoonmaker

Degree Offered:

Master of Arts (M.A.)

Special Application

Requirements/Information:

Applicants who wish to enroll in the Summer or Fall semester should make every effort to meet the January 15 priority deadline. Applications will be considered until April 1 on a space-available basis. 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 N–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 to student teach. 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. 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 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, child development, 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 and C&T 4726 in the Fall; C&T 4124, C&T 4143, C&T 4336, 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 points)*, such as C&T 4118, Theoretical foundations of childhood education
 - one course in Educational Foundations (2–3 points)*, 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 points): MSTC 5010, Mathematics in the elementary school
 - one course in Methods of Teaching Science (3 points): 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 points)
- * Appropriate undergraduate courses may be substituted for these requirements; please consult with Preservice faculty.

Each student may use the balance of his/her 40 points as he/she decides, in consultation with an advisor, to specialize in an area of interest, to obtain additional certification, or to sample a variety of graduate-level courses at Teachers College, Columbia University, Union Theological Seminary, or Jewish Theological Seminary.

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)

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.

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 points)*
Required: C&T 4021, Nature and needs of gifted students (2–3 points) and C&T 5023, Exceptionality and intelligence: Theoretical approaches (2–3 points).
Elective: C&T 4025, Educating the young gifted child (2–3 points)
- Teaching Gifted Students (9–12 points)*
Required: C&T 4023, Differentiated curriculum for gifted students (2–3 points), C&T 5023, Planning and implementing programs for gifted students (3 points).
Elective: C&T 4822, Instructional models in the education of gifted students (1–2 points), C&T 5810, New approaches to identifying and educating gifted students (1–2 points), C&T 5902, Problems in special

education: Giftedness (1–3 points)

- Out-Of-Department Requirements (9–12 points): *Preservice students* must take two 3-point courses in teaching reading (6 points) and one additional pedagogy course to be determined in consultation with their advisor (3 points).

Inservice students select additional courses in consultation with their advisor.

- Student Teaching (3–6 points):

Preservice students take C&T 4702, Observation and student teaching in special education: Gifted (3 points) twice, in separate semesters.

Inservice students take C&T 4702, Observation and student teaching in special education: Gifted (3 points) one semester.

- Culminating Project (0 points): A culminating project, arranged in consultation with your advisor, that demonstrates your ability to integrate your theoretical knowledge with practical problems and issues in gifted education.

*The number of points in the first two categories must equal 17–20.

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 points)
- HUDM 5122, Applied Regression Analysis (3 points)
- C&T 7500, Dissertation Seminar in Curriculum and Teaching (3 points)
- C&T 7501 Dissertation Seminar in Curriculum and

Teaching (3 points), plus one additional course in research methods (2–3 points).

- 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 Disabilities

(Code: TEN)

Acting Program Coordinator:
Professor Reid

Degrees Offered:

Master of Arts (M.A.)

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

Program Description:

The Master of Arts program is designed to prepare teachers to work with students with specific disabilities. The program is based on the assumption that successful teachers of students with learning disabilities must have a thorough understanding of the nature of learning and of learning disabilities and must also be skilled in planning and evaluating instruction and in collaborating with others who work with these students in various settings. The program requires a minimum of 34 points. Graduates who meet the requirements of the program will be recommended for the New York State Certificate in Special 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 require-

ments, complete course work in learning disabilities, and undertake dissertation research on a problem related to learning disabilities.

Degree Requirements:

Master of Arts

The basic curriculum for M.A. students includes:

- C&T 4046, Introduction to learning disabilities (2 points)
- C&T 4047, Education of students with learning disabilities (2 points)
- C&T 4048, Diagnosis and remediation of math learning disabilities (2 points)
- C&T 4853, Multisensory teaching of basic language skills (3 points)
- C&T 4049, Educational accommodations and modifications for students labeled learning disabled (2 points)
- C&T 4301, Practicum in educational assessment (3 points)
- C&T 4705, Student teaching in learning disabilities (6 points in two semesters)
- C&T 5905, Problems in Special Education: Learning disabilities (2 points)*
- HBSK 4072, Theory and techniques of reading assessment and intervention (3 points)
- HBSK 5373, Practicum in diagnosis of reading difficulty (3 points)
- C&T 4501, Teacher education lectures (0–2 points)*
- C&T 4504, Child abuse & Drug abuse detection and reporting (0 points)**

**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 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.*

In addition to the above, four to six points in elective courses should be chosen in consultation with an advisor. Selection is influenced by factors such as previous academic background and career objectives. For Preservice students, the minimum number of points required is 36. Students must take, in lieu of electives, 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 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 points), HUDM 5122, Applied Regression Analysis (3 points), C&T 5502, C&T 7500, Dissertation Seminar in Curriculum and Teaching (3 points), C&T 7501 Dissertation Seminar in Curriculum and Teaching (3 points)—optional, plus one additional course in research methods (2–3 points).
- Other courses are selected in consultation with an advisor.

Reading and Learning Disabilities

(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

Disabilities 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.

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 desire additional, more specialized training within the reading specialist area, 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 Disabilities 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 Disabilities.

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 Disabilities Core (25 points):

- C&T 4000, Introduction to special education (2–3 points)
- C&T 4046, Introduction to learning disabilities (2–3 points)*

- C&T 4047, Education of students with learning disabilities (2–3 points)*
- C&T 4048, Diagnosis and remediation of math learning disabilities (2–3 points)*
- HBSK 4072, Theory and techniques of reading assessment and intervention (3 points)*
- HBSK 4074, Reading comprehension strategies and study skills (3 points)*
- HBSK 4077, Adult basic literacy (3 points)
- C&T 4136, Methods and materials for reading instruction (2–3)
- C&T 4705, Student teaching in learning disabilities (3 points)*
- C&T 4853, Multisensory teaching of basic language skills (3 points)
- HUDK 5090, Psychology of language and reading (2–3 points)
- HBSK 5099, Theories of cognitive processes in writing (3 points)
- HBSK 5376, Practicum in intervention with reading and school subject difficulty (3 points)*
- HBSK 5377, Advanced practicum in intervention with reading and school subject difficulty (3 points)
- HBSK 5080, Seminar in consultation and evaluation in reading (3 points)*
- C&T 4501, Teacher education lectures (0–2 points)*
- C&T 4504, Child abuse & drug abuse detection and reporting (0 points)*

Testing and Measurement Core (13 points):

- C&T 5905, Seminar in curriculum & teaching: Learning disabilities (2–3 points)*
- HUDM 4050, Introduction to measurement (2–3 points)*
- C&T 4301, Practicum in educational assessment (3 points)*
- HBSK 5373, Practicum in diagnosis of reading difficulty (3 points)*

- HBSK 5374, Advanced practicum in the psycho-educational assessment of reading difficulties (3 points)*
- Learning and Development Core (9 points):*
- HUDK 4020, Theories of human development (2–3 points)
 - HUDK 4022, Developmental psychology: Childhood (2–3 points)
 - HUDK 4023, Developmental psychology: Adolescence (2–3 points)
 - HUDK 4027, Development of mathematical thinking (3 points)
 - HUDK 4029, Theories of human cognition and learning (2–3 points)
 - HBSE 4076, Introduction to neuropsychology (3 points)
 - HBSE 4079, Language development and habitation: The foundations (2–3 points)
 - HUDK 4121, Developmental psychology (2–3 points)
 - HBSK 5070, Neural bases for language and cognitive development (3 points)
 - Electives (13 points):

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. Introduction to special education (2–3)

Faculty. Enrollment limited to 35 students. A first course in special education offered for students who are not special education majors. The course is a study of educational programs for children and adolescents with physical, mental, emotional, or sensory handicaps. Emphasis is placed on the way these special education programs fit, or should fit, into ongoing work in schools. Special fee: \$25.

C&T 4001. Teaching students with disabilities in the regular classroom (3)

Faculty. Problems of educational assessment, curriculum and teaching, organization, and guidance of students with physical, cognitive, affective, and sensory disabilities. For non-majors. Special fee: \$10.

C&T 4002. Basic course in the theory of curriculum design (3)

Professor Lesko or Schoonmaker. The nature and design of educational activities: theory, research, and practice of curriculum design.

C&T 4004. Basic course in school improvement (3)

Professor Knight. Major themes include state of the field regarding school change, schools as social organizations, the individual in the organization, theories of change, and implementation strategies and processes.

C&T 4005. Principles of teaching and learning (3)

Professor Whitford. 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; inter-relationship 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 Gordon, Parnes, Renzulli, Taba, Tannenbaum, Taylor and Williams. Course also offered as summer workshop C&T 4822.

C&T 4023. Differentiated curriculum for gifted students (2–3)
Dr. Wright. Development and application of guidelines and planning differentiated curriculum for gifted and talented students.

C&T 4025. Educating young gifted children (2–3)
Dr. Wright. Examination of theories and practices relevant to the education of the young (preschool through second grade) gifted child with particular focus on the development of critical-thinking and problem-solving skills.

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 disabilities (2–3)
Professor Reid. Enrollment by permission only. This course is designed to examine the psychological and social characteristics of children and adolescents described as learning disabled.

C&T 4047. Education of students with learning disabilities (2–3)
Faculty. Procedures for teaching students with learning disabilities. Discussion and demonstration of selected methods applicable in resource room programs, regular and special classes, and individual remedial instructional settings.

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 disabled (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 (2–3)
Professor Schoonmaker. Theory and practice of supervision in elementary and secondary schools. Emphasis is on the role of the supervisor in improvement of instruction and curriculum development. Students practice techniques for improving supervisory skills through role playing, case studies, and analysis of teaching. Attention given to creating programs for continuous professional growth of elementary and secondary school teachers, paraprofessionals, and leadership personnel.

C&T 4052. Designing curriculum and instruction (2–3)
Professor Lesko or Oyler or faculty. 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. Normal and atypical development of young children (2–3)
Professor Recchia. A first course in early childhood special education for majors and non-majors. Development of infants, toddlers, and preschoolers with and without disabilities. Cross-categorical.

C&T 4081. Programs for young children with disabilities (2–3)
Professor Recchia or Dr. Bernard. Curriculum development and instructional strategies for exceptional young children birth to age 5, 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. 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 environmentally-derived content.

C&T 4117. Play: The roots of competence in young children (3)
Faculty. The origins of play and related aspects of development with implications for practice.

C&T 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 transitioning 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 4124. Curriculum development in elementary education (2–3)
Professors Goodwin, Oyler, Schoonmaker and Staff. Permission required. Open to student teachers, interns, assistant and beginning teachers who are concurrently working in elementary or middle schools. Continuation of C&T 4123, with emphasis on teaching of social studies, the interrelationship of various instructional fields, and team curriculum development.

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 4138z. Literacy instruction in the early and middle years (6)

Professor Calkins. An over view of methods of teaching reading and writing including guided and shared reading, miscue analysis, literature circles, conferring in reading and writing, genre studies, etc.

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 Goodwin, Oyler, Schoonmaker and Staff. Permission required. Developing a curriculum in social studies: emphasis on rational-empirical and emergent models; critical examination of current practices. Material 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 (3)

Professor Calkins. The course integrates theory and practice for teachers. Topics include writing development, research on writing, models for responding to and evaluating student writing, and classroom methods for teaching the writing process in elementary classrooms.

C&T 4159. Teacher education programs (2–3)

Faculty. Current developments in programs for the preparation and inservice development of teachers for elementary and secondary schools.

C&T 4160. Supervision in pre-service 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: Professional/social/personal context 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 exceptional children. Analysis of observational and test data; formulation of educational programs for exceptional learners. Conducted in the Center for Educational and Psychological Services or in appropriate community facilities. Course meets one full day a week. 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 or Dr. Bernard. 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 4337. Models of teaching: Practicum

Professors Goodwin, Oyler, Schoonmaker, and Staff. Permission required. Class meets for six sessions. Consult instructors for exact dates during the term each class will meet. 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, staffing, supervision, and curriculum design. Video tape recorded peer teaching and analysis.

C&T 4334. Group process strategies (1)

C&T 4335. Cooperative learning (1)

C&T 4336. Synectics and role playing (1)

C&T 4337. Concept attainment and formation (1)

C&T 4501. Teaching and learning in the multicultural classroom (0–2)

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 (char-

acterized 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)

Professor Genishi, Goodwin, Lesko, Kiefer, or Siegel. 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 disabilities (3)

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 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 (including full-time student teaching) in elementary education (4–6)
Professors Schoonmaker, Goodwin, Oyler, and Staff. Permission required. Students must begin in the Autumn term. Full-time student teaching under the sponsorship of the regular classroom teacher with supervision shared by the cooperating teacher and Teachers College staff members. Assignments to classrooms provide for emphasis on education for younger and older children in traditional and innovative settings, including the College's Professional Development School. Given in conjunction with C&T 4123 and C&T 4124. Eighteen hours per week field placement plus class hours. 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 4729. Professional laboratory experiences (including student teaching) in elementary education (4)
Professor Goodwin. Permission required. Prerequisites C&T 4123 or C&T 4124 and C&T 4726. Designed for students who have completed two semesters of student teaching as an additional laboratory experience. (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 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. (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 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 disabilities (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. 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, C&T 4138, or equivalent. 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, in-service education, and organizational improvement. Attention given to applications of staff development using institutional cooperation, organizational dynamics, and research on teacher training. Designed for principals, supervisors, curriculum directors, and others concerned with staff and program development to deal with change in their own institutional contexts.

C&T 5074. Curriculum and teaching policy (3)
Professor Sobol. Prerequisite: C&T 4004. Examination of the theoretical and political bases of curriculum and teaching policies and their influences on school organizations and teaching practices. Explores the policy-making process from policy design through implementation.

C&T 5112. Issues in child care and education: Infancy through school age (2–3)
Dr. Farber. An examination of such issues as inclusion, equity, effects of welfare reform, training needs, and the role of transdisciplinary supports within the context of recent demographic, social, political, and economic changes in our society. Public and private sector responses to newly emerging issues, the dilemmas posed, and recommended solutions. Evaluations of the adequacy of the responses to the demand for child care, and the nature, characteristic, and quality of the supply. Invited speakers present perspectives from education, health and mental health, govern-

ment, business, the community, advocacy, and communication.

C&T 5113. Influence of social factors in childhood education: Developmental strategies (2–3)
Professor Genishi. Application of developmental, sociocultural, ethnological, and socialization theory and research to the understanding of children's social lives in the classroom and other settings.

C&T 5114. Cognitive curriculum in early childhood education (3)
Professor Williams or Dr. Hoffman. Focus on the practical application of cognitive theory and research in the design of curricula for children from birth to 8 years of age. Emphasis on development of a sample curriculum.

C&T 5118. Infant and toddler development and practice (2–4)
Professor Recchia or Dr. de Groot Kim. Permission required. Theory is related to practice and research with infants, toddlers and families. Students participate in classroom practice and meet for weekly seminar on-site at the Rita Gold Early Childhood Center. Enrollment is for 1 or 2 semesters.

C&T 5302. Advanced 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 disabilities (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 5501. Research methods in curriculum and teaching
Professor Borland or Siegel. Understanding and developing competence in research methods for studying curriculum and teaching.

C&T 5502. Introduction to qualitative research in curriculum and teaching (2–3)
Professor Genishi 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 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. Problems in Special Education: Learning disabilities (1–4)
Professor Reid. 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 5908. Independent study-infancy 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. For doctoral candidates. Firsthand experience in a center where curriculum research is in progress.

C&T 6405. Advanced internship-learning disabilities (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 childhood (1–6)
Professor 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, Oylar, and Staff. Permission required. Prerequisite: C&T 4160 or C&T 4051. Work with curriculum leaders in an ongoing program. Fieldwork involves school system problems and leadership processes.
C&T 6452. In-Service (2–4)
C&T 6453. Preservice (2–4)

C&T 6501-C&T 6502. Studies in curriculum and teaching (2–3)
Faculty. Permission required. Integrating seminar provides an opportunity for students to discuss issues and questions fundamental to the field of curriculum and teaching.

C&T 6503-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: School Research and Development (2)
Professor Goodwin. 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 seminar-giftedness (3)
Professor Borland. For doctoral students in Giftedness. Recent developments in theory and research in gifted education.

C&T 6507. Advanced seminar-learning disabilities (3)
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 seminar-infancy and early childhood (3)
Professor Recchia. For doctoral students in special education and related fields. Recent developments in theory and research as related to the specialization from psychological, educational, sociological, and/or medical sources.

C&T 6532. Seminar in reading/language arts and related research (3)
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)
Professor Brooks-Gunn, Genishi, 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. 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 about 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 3–4)
Dr. Birsh. 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)
Dr. Birsh. 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)
Dr. Birsh. 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)
Dr. Birsh. 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.

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
 Physical Education: (212) 678-3154
 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:

Neurosciences and Education
 Reading Specialist
 Reading and Learning-Disabilities*
 School Psychology

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

Special Education:

Administration of Special Education
 Behavioral Disorders
 Blindness and Visual Impairment
 Cross-Categorical Studies
 Deaf or Hard of Hearing
 Guidance and Habilitation
 Instructional Practice
 Mental Retardation
 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 Studies

Faculty:

Professors:

John P. Allegrante (Health Education)
 William G. Anderson (Physical Education)—Emeritus
 Charles E. Basch (Health Education)
 Ann E. Boehm (School Psychology)—Emeritus
 Isobel R. Contento (Nutrition)
 R. Douglas Greer (Special Education)
 Joan D. Gussow (Nutrition)—Emeritus
 Linda Hickson (Special Education)
 Lawrence H. Kushi (Nutrition)
 Dennis E. Mithaug (Special Education)
 Kathleen A. O'Connell (Nursing Education)
 Stephen J. Silverman (Physical Education)

Adjunct Professors:

Terry T. Fulmer (Nursing Education)
 Barbara Krainovich-Miller (Nursing Education)
 Clarence E. Pearson—Honorary (Health Education)

Associate Professors:

Marla R. Brassard (School Psychology)
 Ursula Kirk (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)
 Roseanne C. Gotterbarn (School Psychology)
 Toni Liquori (Nutrition)
 Marie T. O'Toole (Nursing Education)
 Margaret G. E. Peterson (Health Education)
 John T. Pinto (Nutrition)
 Joanne Rudolph (Nutrition)
 Lora A. Sporny (Nutrition)
 Lillian Yung (Nutrition)
 Patricia A. Zybert (Health Education)

Visiting Associate Professors:

C. Ronald MacKenzie—Honorary (Health Education)
 Connie N. Vance (Nursing Education)

Adjunct Assistant Professors:

Sharon R. Akabas (Nutrition)
 Lynne M. Bejoian (Special Education)
 Janice Berchin-Weiss (Special Education)
 Bonnie Bernstein (Nutrition)
 Giannina Convertino (Special Education)
 Gay Culverhouse (Special Education)
 Diane Dillon (School Psychology)
 David Erlanger (Neurosciences and Education)
 Sara E. Hogin-McDonough (Special Education)
 Thomas M. Kelly (Special Education)
 Ishita Khemka (Special Education)
 Michael Koski (School Psychology)
 Eugene McMahon (Special Education)
 Sheila O'Shea Melli (Nursing Education)
 Laura Menikoff (Reading Specialist)
 Stephen Morgenstern (Special Education)
 Christine E. Pawelski (Special Education)

Russell Rosen (Special Education and ASL as a Foreign Language)
 Barbara Sandberg (School Psychology)
 Merrill Simpson (Nutrition)
 Virginia S. Stolarski (Special Education and Co-Director, Center for Educational and Psychological Services)
 Janet Twyman (Special Education)
 Shannon Whalen (Health Education)

Visiting Assistant Professor:

Elizabeth A. Walker—Honorary (Nursing Education)

Instructors:

Sheila Amato (Special Education)
 Jane Bogart (Health Education)
 Karen Reznik Dolins (Nutrition)
 Maria Hartman (Special Education)
 Susan Lipkowitz (Special Education)
 Leonor Maro (Nutrition)
 Caren Mercer (Special Education)
 Shelley Mesznik (Nutrition)
 Howard Meyer (Physical Education)
 Elizabeth Paul (Health Education)
 Frank Rocco (Health Education)
 Myrna Rosario (Special Education)
 Patricia Rothschild (Special Education)
 Michelle Saunders (Special Education)
 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: Neurosciences and Education, 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, Nutrition (Applied Physiology and Nutrition, Community Nutrition Education, Dietetic Internship, Nutrition and Public Health, Nutrition Education), and Physical 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 and Behavioral Disorders, Blindness and Visual Impairment, Deaf or 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.

American Sign Language, The Teaching of 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

Neurosciences and Education
Reading Specialist
Reading and Learning Disabilities
School Psychology

Neurosciences and Education

(Code: TKN)
Program Coordinator: Professor Ursula Kirk

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. in an applied area such as Learning Disabilities or Reading Specialist. The M.A. 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 program is to prepare a new kind of specialist: a profes-

sional 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 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 three areas for professional specialization within this program:

- a) Psychoeducational Practice-Reading,
- b) Elementary Education,
- c) Special Education,
- d) Human Development, Cognition and Learning, or
- e) Motor Learning.

In effect, students fulfill the master's level requirements in one of these three areas, and thus qualify for the M.A. degree during the 60-point program of study for the Ed.M.

Other students who are professionally qualified before entry to this program may elect to earn the M.A. degree during study toward the Ed.M. For these students, program plans can be arranged to lead to the M.A. degree in one of the following areas: Educational Psychology-Reading, Elementary Education, Motor Learning, Science Education, Developmental Psychology, or Special Education. In such cases, 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:

- HBSK 5024, Early language development (2–3)
- HBSK 4024, Developmental psychology: Adulthood and life-span (2–3)
- HBSK 5219, Adulthood (3)
- HBSK 5023, Cognitive development (2–3)
- HBSK 4020, Theories of human development (3)

Learning and Cognition:

- HBSK 5023, Cognitive development (if not applied toward Developmental requirements)
- HBSK 5097, Psychology of instruction (3)
- A&HG 4011, Cognition
- A&HG 4002, Learning

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)
- BBSQ 4043, The human nervous system (3)
- 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 5044, Educational and clinical applications of neuroscience technology (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

- HBSK 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 pro-

grams 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*.

Neurosciences and Education (Code: TZL)

Clinical Neuropsychology (Code: TZK)

Degree Offered:
Certificate of Attendance

Special Application Requirements/Information:
Applicants must be qualified professionals who hold the doctoral degree.

Program Description:
The Program in Neurosciences and Education offers Postdoctoral Advanced Study programs in both Neurosciences and Education and Clinical Neuropsychology. Contact Professor Ursula Kirk for more information.

Courses:

Neurosciences and Education

BBS 5069. **Brain and behavior I, II** (3)
Professor Gentile. General introduction to higher brain functions with particular emphasis on cortical processes. Analysis and discussion of behavior in selected topical areas: attention, cognition, consciousness, perception and language; consequences of damage on learning and memory.

HBSK 5033. **Human clinical neuropsychology** (3)
Professor Kirk. 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 5274. **Fieldwork: Neuropsychological approaches to reading and cognitive development** (1–3)
Professor Kirk. Permission required. Corequisite: HBSK 5375. Supervised experience in neuropsychological assessment and intervention. Special fee: \$100.

HBSK 6383. **Neuropsychological assessment of children and adults** (3)
Professor Kirk. 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 5371. **Educational neuropsychology** (1–3)
Professor Kirk. Permission required. Educational applications

of neuropsychological assessment findings. Special fee: \$150.

HBSK 5375. **Case studies of reading and cognitive development from a neuropsychological perspective** (4)
Professor Kirk. 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)
Professor Kirk. 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.

Advanced Study

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 assessment 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.

Additional Courses Relevant to Neurosciences and Education

(For course descriptions, see other program listings)

- MSTC 5052-MSTC 5053. **Biochemistry and cell biology** (3–4)
- MSTC 5055. **Electron microscopy** (3)
- MSTC 5152. **Biochemistry and cell biology laboratory** (2)

- CCPJ 4064. **Principles and methods of psychological counseling** (3)
- HBSJ 4160. **Guidance of children and youth** (2–3)
- HBSK 4073. **Psychoeducational assessment and intervention** (1–3)
- HUDK 5023. **Cognitive development** (3)
- HUDK 5024. **Language development** (2–3)
- HBSK 5031. **Family as context for child development** (3)
- HBSK 5096. **The psychology of memory** (3)
- HBSK 5320-HBSK 5321. **Individual psychological testing** (2–3)
- BBSQ 4043. **The human nervous system** (3)
- BBSQ 6513-BBSQ 6517. **Seminars in basic and applied speech science** (3)
- BBSR 4055. **Neuromotor processes** (3)
- BBSR 6562-BBSR 6565. **Seminar in neuromotor processes** (2–3)
- CCPX 4030. **Psychology of adjustment** (3)

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.

The following courses may be taken by students in the Ed.M. Program in Neurosciences and Education. The last digit of each course number corresponds to the area of study: Psychology; Neurosciences and Education; HBSK 4904; HBSK 6904.

Doctoral students in other programs at the college may register for the following courses:

- HBSK 4904. **Research and independent study** (1–3 each course)
- HBSK 6904. **Advanced research and independent study** (1–3 each course)
- HBSK 7504. **Dissertation seminar** (1–3 each course) Permission required. Development of doctoral dissertations and presentation of plans for approval.

Registration limited to two terms.

- HBSK 8900. **Dissertation advisement** (0 each course) Individual advisement on doctoral dissertation. Fee equal to 3 points at current tuition rate for each term. See catalog on continuous registration for Ed.D./Ph.D. degrees.

Reading Specialist

(Code: TKU)

Program Coordinator: Professor Dolores Perin

Degree Offered:

Master of Arts (M.A.)

Program Description:

The Reading Specialist M.A. program provides students with a broad foundation in applied educational psychology as it relates to literacy acquisition, and concentrated preparation in the assessment and remediation of reading and writing difficulties. Students may focus on work with child, adolescent, or 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.
- Identify cognitive processing problems that underlie reading decoding, reading comprehension, and writing difficulties.
- Complete an assessment of reading, writing, and related skills.
- Formulate and deliver an appropriate intervention plan based on previous findings and continuous diagnostic teaching.
- Evaluate the effectiveness of remedial interventions and

revise techniques and strategies when necessary.

- 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 collaborative with other professionals and institutions.

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).

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, psychoeducational clinics, and private practice.

Degree Requirements:

The Master of Arts consists of approximately 34 points, and can be pursued either part-time (two academic years and two summers) or full-time (one academic year and two summers). A completion of a Master's Integrative Project is required for graduation.

Required Courses (10 required courses, total 28–30 points):

- HUDK 5090, Psychology of language and reading (2–3)
- HUDM 4050, Introduction to measurement (2–3)
- HBSK 4072, Theory and techniques of assessment and intervention in reading (3)
- HBSK 5373, Practicum in psychoeducational assessment of reading and school subject difficulties (HBSK 4072 prerequisite or corequisite, permission required) (3)

- HBSK 5376, Practicum in intervention with reading and school subject difficulties (HBSK 4072 and HBSK 5373 prerequisite or corequisite, permission required) (3)
- HBSK 5374, Advanced practicum in psychoeducational assessment of reading and school subject difficulties (HBSK 5373 & HBSK 5376 prerequisites) (3)
- HBSK 5377, Advanced practicum in intervention with reading and school subject difficulties (HBSK 5376 prerequisite) (3)
- HBSK 4074, Reading comprehension strategies and study skills (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)
- HBSK 6576. Acquisition of reading and writing ability (permission required) (3)

Elective Courses (2 or 3 courses, total 6 points): See advisor.

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 intended to be completed during the final term of a student's enrollment in the program 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 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.

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 doc-

toral 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 points)
- C&T 4050*, Introduction to learning disabilities (2–3 points)
- C&T 4051*, Education of students with learning disabilities (2–3 points)
- C&T 4052*, Diagnosis and remediation of math learning problems (2–3 points)
- HBSK 4072*, Theory and techniques of assessment and intervention in reading (3 points)
- HBSK 4074, Reading comprehension strategies and study skills (3 points)
- HBSK 4077, Adult basic literacy (3 points)

- C&T 4136, Methods and materials for reading instruction (2–3 points)
- C&T 4138, Teaching reading: a whole language perspective (2–3 points)
- C&T 4705*, Observation and student teaching: learning disabilities (3 points.)
- C&T 4853, Multisensory teaching of basic language skills (3 points)
- HUDK 5090, Psychology of language and reading (2–3 points)
- HBSK 5099, Theories of cognitive processes in writing (3 points)
- HBSK 5376*, Practicum in intervention with reading and school subject difficulty (3 points)
- HBSK 5377, Advanced practicum in intervention with reading and school subject difficulty (3 points)
- HBSK 5580*, Seminar in consultation and evaluation in reading (3 points)
- C&T 4501*, Core course: teacher education lecture (0–2 points)
- C&T 4504*, Child abuse and drug abuse detection and reporting (0 points)

Learning and Development Core

A total of at least 9 points are needed to fulfill this core requirement.

- HUDK 4020, Theories of human development (2–3 points)
- HUDK 4022, Developmental psychology: childhood (2–3 points)
- HUDK 4023, Developmental psychology: adolescence (2–3 points)
- HUDK 4027, Development of mathematical thinking (3 points)
- HUDK 4029, Theories of human cognition and learning (2–3 points)
- HBSK4076, Introduction to neuropsychology (3 points)
- C&T 4079, Language development and habitation: the foundations (2–3 points)

- HUDK 4121, Developmental psychopathology (2–3 points)
- HBSK 5070, Neural bases for language and cognitive development (3 points)

Testing and Measurement Core

A total of at least 13 points are needed to fulfill this core requirement.

- C&T 4004*, Tests and remedial work for children with learning disabilities (2–3 points)
- HUD M4050*, Introduction to measurement (2–3 points)
- C&T 4301*, Practicum in the educational assessment of exceptional children (3 points)
- HBSK 5373*, Practicum in the psychoeducational assessment of reading difficulties (3 points)
- HBSK 5374*, Advanced practicum in the psychoeducational assessment of reading difficulties (3 points)

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 2 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 background, 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 professionals-in-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 bereavement and 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 certifi-

cation 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 assessment of reading and school subject difficulties
- HBSK 5031, Family as a context for child development

Spring

- HBSK 4073, Psychoeducational assessment and intervention
- 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
- CCPX 4137, Group dynamics: Theory and experience

Second Year:

Fall

- HBSK 5070, Neural bases for language and cognitive development (Section 1)
- 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

The doctoral program (Ed.D.) requires 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—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 (Section 1)
- HBSK 5373, Practicum in diagnosis of reading and school subject difficulties (Section 1)
- HBSK 6570-HBSK 6578, Research practicum

Spring

- HBSK 5321, Individual psychological testing
- HBSK 4073, Psychoeducational assessment and intervention
- HUDK 5023, Cognitive development
- HBSK 6380, Practicum in psychoeducational assessment with culturally diverse students
- HBSK 6570-HBSK6578, Research practicum

Summer

- HUDM 5059, Psychological measurement
- HUDM 5122, Applied regression

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
- CCPX 4137, Group dynamics: Theory and experience
- HBSK 6570-HBSK6578, Research practicum

Spring

- HBSK 6383, Neuropsychological assessment of children and adults
- HUDM 5123, Experimental design
- HBSK 5280, Fieldwork
- CCPJ 6362, Group practicum (Section 2)
- HBSK 6570-HBSK6578, Research practicum

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 practicum

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 practicum

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: hearing impaired or neuroscience and education. Each of these options is detailed below.

Hearing Impaired

The focus in Low Incidence Handicaps: Hearing Impaired 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.

The required courses are:

- BBSQ 4042, Audiology
- HBSE 4079, Language development and habituation: the foundation
- HBSE 6070, The psychology of deafness
- HBSE 4072, Development of language for people who are deaf or hard of hearing
- HBSE 5907, Linguistics for ASL
- HBSE 4071, Special methods for teaching the hearing impaired
- HBSE 4070, Psychosocial-cultural aspects of deafness
- HBSE 4871, American Sign Language I
- HBSE 4872, American Sign Language II

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).

Neurosciences and Education

The focus in Neurosciences and Education requires a minimum of 5 courses or 15 points. Of these courses, four are required. One required course focuses on children and meets the APA General Psychology Requirements for biological bases. Another course focuses on the consequences of brain damage in adults.

These two 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 third course focuses on neuropsychological assessment for children and adults. The fourth course is completed by working two days in an external placement. The fifth course, as well as additional course work, can be selected as an elective, with the advice of an advisor.

Required Courses:

- BBS 5069, Brain and behavior I, II (3)
- HBSK 5070, Neural bases of language and cognitive development Section 1, 2 This course focuses on children and meets the general psychology requirements for biological bases.
- HBSK 5033, Human clinical neuropsychology This course focuses on the consequence of brain damage in adults.
- HBSK 6383, Neuropsychological assessment of children and adults
- HBSK 5274, Fieldwork: Neuropsychological approaches to reading and cognitive development

Students work one day in the field and the equivalent of one day at Teachers College. The Teachers College experience

involves working as a member of a diagnostic/intervention team with children and adults with known or suspected neurological basis for their learning problems.

Regular staffing sessions and occasional case conferences allow students to develop and implement a neuropsychological perspective as well as to become familiar with perspectives on behavior which differ from their own. Joint intake sessions and reporting sessions allow students to acquire facility in interpreting the results of neuropsychological testing to clients and parents.

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 also stressed.

HBSK 4072. **Theory and techniques of reading assessment and intervention (3)**
Professor Perin. 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. For students at late elementary levels through young adulthood. Materials fee: \$25.

HBSK 4077. Adult basic literacy (3)

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)

Faculty. 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 4093. Research-independent study in reading (1-3)

Faculty. Permission required. Individualized research and fieldwork projects in literacy assessment and intervention.

HBSK 4770. Observation and student teaching: elementary education (1-5)

Permission required. Student teaching under supervision, with emphasis on reading instruction.

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 development and academic functioning. Materials fee: \$50.

HBSK 5070. Neural bases for language and cognitive development Section 1, 2 (3)

See Program in Neurosciences and Education for course description.

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 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. 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. Consists of two days per week of field placement for two semesters, plus university-based supervision. Must be taken concurrently with HBSK 6382-HBSK 6383. Supervised experience of psychoeducational practice. Supervisory fee: \$100 per semester.

HBSK 5320-HBSK 5321. Individual psychological testing (3)

Professors Kirk and Brassard. Permission Required. Prerequisite or corequisite: HUDM 4050 or equivalent. This is a year-long course open to doctoral students in Counseling and Clinical Psychology and to Ed.M. and doctoral students in School Psychology. Background, administration, and interpretation of major psychological tests from both nomothetic and ideographic

perspectives. Part I covers the administration of major measures.

Part II covers 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 psychoeducational assessment of reading (3)

Faculty. Prerequisite or corequisite: HBSK 4072. Materials fee: \$150.

HBSK 5374. Advanced practicum in psychoeducational assessment of reading (3)

Faculty. Prerequisite: HBSK 5373. Materials fee: \$150.

HBSK 5375. Case studies of reading and cognitive development from a neuropsychological perspective (4)

Professor Kirk. Materials fee: \$150.

HBSK 5376. Practicum in intervention with reading (3)

Faculty. Prerequisite or corequisite: HBSK 4072, HBSK 5373. Materials fee: \$150.

HBSK 5377. Advanced practicum in intervention with reading (3)

Faculty. Prerequisite: HBSK 5376. Materials fee: \$150.

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 Peverly. Permission required. Current topics in reading and schooling; professional issues; 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 and intervention 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: HBSK5033 or HBSK5070; and HBSK5320. 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. Required of all doctoral students admitted in or after 1983. 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 6575. Child development in the family context (1-4)

Faculty. Permission required. Prerequisite: HBSK 5031. Analysis of current research of the family's influence on the development of children. Individual exploration of research topics.

HBSK 6580. Advanced seminar in psychology and education (0-3)

Faculty. Permission required. Prerequisite: HBSK 5080-HBSK 5081. Limited to doctoral students in applied educational and developmental psychology. Research investigations of current educational problems.

HBSK 6584. Seminar in school psychology consultation (1-5)

Professor Peverly. Advanced seminar in school consultation and classroom management.

HBSK 6590. Seminar in concept acquisition in young children (3)

Faculty. Permission required. Theories (Bruner, Piaget, Gagne, Klausmeier) and research on the development of concepts of time, space, and quantity in young children.

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.

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. or M.S. programs.

Doctoral applicants are required to submit scores from the GRE General Test or the Miller Analogies Test, and 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 (21 Points)

Required Core Courses (12 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)
- HBSS 5110, Determinants of health behavior (3)

Elective Courses (9 points):

- HBSS 4000, A survey of nutrition: fads and popular fantasies (3)
- HBSS 4010, Nutrition and behavior (3)
- HBSS 4011, Women and weight (3)
- HBSS 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 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 pre-doctoral project prior to or during the term in which 60 points of applicable graduate study have been completed.

The program of study for the Doctor of Education degree in Health Education includes required courses, course work in required areas, and elective courses. The exact program and sequence of study is determined by the previous academic preparation, professional experience, and professional career objectives of the student. Programs of study typically exceed the minimum College requirement of 90 points, with most candidates offering between 90–120 points for the degree. Selection of courses that fulfill an area requirement in the program of study listed below is guided by individual needs of the student and 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 4130. Alcohol and health (3)

Professor Wallace. Background and theory related to alcohol use and misuse; health and social consequences of alcohol misuse; consideration of special populations, such as children of alcoholics; review of alternative approaches to prevention and treatment.

HBSS 4140. Developing workplace health promotion programs (3)

Professor Allegrante. Provides a comprehensive step-by-step process to designing, implementing, and evaluating health promotion programs at the workplace.

HBSS 4141. Health and illness in 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 (3)

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 I5690. **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: Professorial Role (Nurse Educator)

(Code: TNP)
Program Coordinator: Kathleen A. O'Connell, Ph.D., R.N., F.A.A.N.

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 must be a Registered Nurse in any U.S. state or in Canada and hold a baccalaureate degree with a cumulative grade point average of 3.5 or better. Test scores of at least 540 on either the Graduate Record Examination (GRE) or at least 54 on the Miller Analogy Test (MAT), as well as a writing sample (a course paper, master's thesis, or a published paper) are required. Also required is a professional resume.

Program Description:
Nurse education in an academic setting began at Teachers College in 1899. These programs have a long and distinguished tradition and commitment to the education of nurses who have diverse roles in academic and community settings within the United States and abroad.

The programs reflect a commitment to the scholarly inquiry of critical issues that face nursing education and influence the character and goals of nursing education programs.

The curriculum is designed to provide an excellent foundation in scientific inquiry and nursing theory and development, quantitative and qualitative research designs, as well as in curriculum and teaching. Scholarly study of nursing is

central to the program. (Under the direction of Dr. Kathleen O'Connell, Isabel Maitland Stewart Professor of Nursing Education, the program in nursing education is being redesigned for those entering in the year 2001. For more information, contact Dr. O'Connell at (212) 678-3120 or O'Connell@exchange.tc.columbia.edu.)

Graduates of the doctoral program assume major positions in academic, health care, research and practice settings. They are leaders and meet the challenges of change in nursing education and health care. Their commitment to scholarly inquiry of critical issues that face nursing education and the instruction of current leaders for the improvement of nursing education and the health and nursing care of the populations nurses serve are essential in the development of the arts, science, and practice of nursing.

Placement of the Program in Nursing Education within the Department of Health and Behavior Studies ensures a multidisciplinary approach to problems in nursing education, society, and health. The Professorial Role program combines teaching, research, and services to society to meet scholarship responsibilities of higher education. This is a unique program that prepares nurse educators to work in varied settings and accomplish behavioral change through education. The Department provides access to faculty expert in self-care, rehabilitation, violence, addictions, and child and adolescent health.

Degree Requirements:
The Doctor of Education program requires a minimum of 90 points beyond the baccalaureate degree.

Major (35–45 points)
This includes introductory and advanced courses in the selected area of specialization. Students may include departmental courses listed under role preparation and cognates related to the area of specialization in this component.

Research (19–21 points)
Appropriate courses related to design of the dissertation.

Broad and basic areas (14–21 points)
This refers to the broad and basic areas of professional scholarship.

Electives (3–6 points)

These courses should round out scholarly studies.

Courses:
General Nursing Domain 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 5001. The practice of nursing science (3)
Faculty. Prerequisites: HBSN 4005 and HBSN 5000. Design and implementation of a nursing-science based strategy to advance practice. Priority given to populations considered at risk or underserved.

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 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 6507. Seminar on theory in practice (3)
Faculty. Prerequisites: 2 courses in nursing theory. Design and evaluation of theoretically/empirically derived models for advanced practice in nursing education, management and care of clients.

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 4050. Health problems and issues in society (3)
Faculty. Political and economic concepts influencing the delivery of health care services. Consideration of health issues facing the public and possible courses of action.

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. Methods in nursing research (3)
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 5340. Practicum in archives and historical research (3)
Faculty. Prerequisites: HBSN 5040 and HBSN 5043. An introduction to the theory and practice of archives administration and historical 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 Milbank Memorial Library.

HBSN 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 HBSN 5541. Continuous Autumn/Spring enrollment is required until the semester in which presentation is held.

HBSN 5541. Master's thesis seminar in nursing (3)
Faculty. Permission required. Prerequisite: HBSN 5540. Involves presentation of Master's thesis proposal for faculty approval.

HBSN 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.

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.

Role Preparation Courses

These courses focus on combining cognate and nursing knowledge and synthesizing knowledge needed for fulfillment of the role of nurse educator.

General Courses in Role Preparation

HBSN 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.

HBSN 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 health care 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.

HBSN 6522. Policy formation and governance in nursing (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.

Professorial Role

HBSN 4331. Curriculum in nursing education (3)
Faculty. Application of curriculum theories to the development of nursing curriculum. Simulated or real practice in curriculum development.

HBSN 4332. Classroom teaching in nursing (3)
Faculty. Corequisite or prerequisite: HBSN 4331. Consideration of teaching methods used in the college nursing classroom. Practice in one or more of the methods.

HBSN 5022. Administrative roles of faculty (3)
Faculty. Administrative responsibilities of faculty in collegiate nursing programs. Types of administrative organizations, agency relations, student relations, budget, collective bargaining, and accreditation. Roles in hiring, retention, promotion, and tenure of faculty.

HBSN 5031. Curriculum designs and issues in nursing education (3)
Faculty. Prerequisite: HBSN 4331. Problems and issues in curriculum content, organization, and planning for curriculum development. Selected nursing curricula critiqued.

HBSN 5230. Field experience in nursing education (3)
Faculty. Permission required. Prerequisites: HBSN 4331, HBSN 4332, HBSN 5530, HBSN 5031, HBSN 5022. Supervised practice in teaching student nurses in one or both settings, classroom and/or clinical.

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 6532. Advanced teaching strategies in nursing education (3)
Faculty. Prerequisite: HBSN 4332. Examination of generalized approaches to nursing education, subsuming but more generalized than teaching methods.

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.

Nursing Education: Executive Role

(On the master's level, preparation for this role is identical with preparation for the professional role. The same courses are used for this purpose.)

HBSN 6220. Advanced study of administration in schools of nursing (3–6)
Faculty. Permission required. Problems and issues at both departmental and decanal levels. Observation and experience in administration in a school of nursing under preceptorship of a dean or director.

HBSN 6521. Legal aspects of nursing education (3)
Faculty. Legal responsibilities of faculty and administration in an educational setting.

HBSN 6625. Colloquium in nursing education organization (3)
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.

Nutrition

Program Coordinator: Professor Isobel R. Contento
Professor Lawrence H. Kushi

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 (or the Miller Analogies Test for the program in Applied Physiology and Nutrition). A writing sample is required for doctoral applicants, preferably a master's thesis, course paper, or published article.

Applicants must also provide evidence of completion of prerequisite courses, including introductory nutrition, statistics, general and organic chemistry, biochemistry (requiring organic chemistry as a prerequisite) and human physiology. The latter two must have been taken within 5 years with a grade of B or better. Foods 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 must submit an ADA Plan V verification statement in addition to being 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. Students

may meet with our ADA academic program advisor to develop an integrated plan of studies.

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 embodied in the 40-point Master of Science degrees or the 60-point Master of Education degree.

Program Description:

As we enter the year 2000 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 nutrition-related 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 ser-

vice 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
- 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 educational experiences in addition to traditional classroom lectures and discussions. Among the course-related educational experiences available to students are: team projects in community nutrition, group planning and teaching of nutrition lessons to selected audiences in the community, food education and gardening projects in schools, dietary analyses and on-line computer activities.

In addition, all three Master of Science programs require a block of supervised fieldwork as well as a substantial integrative project. This 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.

Students are welcome to participate in the activities of the Nutrition Education Program's community service organizations, NERP and 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, because of Teachers College's location in New York City, there are 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 pre-professional internship program with Developmental

Accreditation 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 (HBSS 5241-HBSS 5244) is offered on a part-time basis requiring a year 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. All three M.S. degrees require the following core courses:

- HBSS 4010, Food and behavior
- HBSS 4013, Nutritional ecology
- HBSS 4014, Community Nutrition
- HBSS 5010, Advanced nutrition I
- HBSS 5011, Advanced nutrition II
- HBSS 5013, Strategies for nutrition education and health behavior change
- HBSS 5014, Analysis of current literature and research in nutrition
- HBSS 5015, Assessing nutritional status and dietary behaviors
- HBSS 5034, Clinical nutrition
- HBSS 5036, Nutrition counseling

- HBSS 5232, Extended field-work in nutrition education
- HBSS 6100, Measurement and evaluation in health education

Nutrition Education:

Students working toward the 40-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, or mass media settings in the United States or developing countries.

In addition to the core curriculum in nutrition science, the behavioral aspects of diet, and nutrition education, students are required to take HBSS 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 nutrition education in communities, work sites and schools; nutrition counseling; mass media; or international community nutrition education. The program 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-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, and program planning. 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 participation in multidisciplinary health teams to provide programs to meet public needs.

Applied Physiology and Nutrition:

The Program in Nutrition Education and the Program in Applied Physiology offer a joint course of study leading to a 45-point Master of Science degree in Applied Physiology and Nutrition (APN). In addition to the core courses in nutrition, students are required to take a core of courses in applied physiology (see section below on APN for more details). The program prepares students to provide individual counseling and group education in nutrition and exercise and to design and implement exercise and nutrition programs in weight control centers, work sites, fitness centers, 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 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 education, in addition to developing special skills and knowledge appropriate 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 (54–60 points)
- II. Research and Evaluation (13–18 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.

Courses:

Introductory courses

HBSS 4000. Introduction to nutrition: Facts, fallacies, and trends (3)

Professor Contento and Dr. Sporny (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.

HBSS 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.

HBSS 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.

HBSS 4011. Weight, eating problems, body image, and women (2)

Drs. Akabas and Bernstein. This course for students and practitioners examines the psychological, sociological, physiological, and nutritional issues related to weight, eating disorders, and body image and interventions. The issues will be discussed using case material and the research literature.

HBSS 4013. Nutritional ecology (2-3)

Dr. Liquori and Professor Gussow. 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.

HBSS 4014. Community nutrition (2)

Professor Kushi. Nutrition as a career. Survey of nutrition services both private and government sponsored; professional roles. The development of nutrition policy and legislation, and ethical and legal issues in nutrition practice.

HBSS 4150. Sports nutrition (3)

Ms. Dolins. For nonmajors only. A practical course designed to help health professionals give the most accurate and up-to-date information to active people helping to 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.

Intermediate and Advanced Courses

HBSS 5010. Advanced nutrition I (3)

Dr. Simpson. Prerequisite: courses in biochemistry and physiology. 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.

HBSS 5011. Advanced nutrition II (3)

Dr. Pinto. Prerequisites: courses in biochemistry and physiology. In-depth review of current knowledge and research on the biochemical and physiological aspects of vitamins and minerals; applications to diet.

HBSS 5013. Strategies for nutrition education and health behavior change (3)

Professor Contento. Permission required. 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 practice components.

HBSS 5014. Analysis of current literature and research in nutrition (3)

Professor Kushi. Permission required. Prerequisite or parallel: HBSS 5010-HBSS 5011, basic statistics course, a research design course. 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, weight loss regimens, biotechnology, supplements and alternative therapies.

HBSS 5015. Assessing nutritional status and dietary behaviors (3)

Professor Kushi. Prerequisite: Basic statistics course. 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.

HBSS 5018. Nutrition and human development (3)

Dr. Sporny (Summer Session A). Prerequisite: HBSS4000 or equivalent. 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.

HBSS 5031. Nutrition administration (1-3)

Faculty. Prerequisites: HBSS 4014, HBSS 5015. 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.

HBSS 5034. Clinical nutrition (3)

Ms. Dolins. Prerequisites: courses in biochemistry and physiology. Discussion of the etiology and pathogenesis of selected disease states and implications for nutritional management.

HBSS 5036. Nutrition counseling (2)

Ms. Mesznik. Course provides conceptual basis for patient/client counseling and focuses on skills development including verbal responses and problem-solving process. Includes audiovisual support materials, simulated practice and field observations. Special fee: \$10.

HBSS 5231-HBSS 5233.

Extended fieldwork in nutrition education, nutrition and public health, and applied physiology and nutrition

Dr. Sporny. Permission required. A block of supervised field experience required of all majors. Fieldwork is taken near completion of course work.

- HBSS 5231. **Nutrition and public health (2-4)**
- HBSS 5232. **Nutrition education (2-4)**
- HBSS 5233. **Applied physiology and nutrition (2-4)**

HBSS 5241-5244. Preprofessional practice in nutrition

Dr. Yung. Permission required. Prerequisite: HBSS 5013, HBSS 5034, HBSS 5331. Preprofessional practice in service settings in metropolitan New York, Rockland and Westchester counties and Connecticut including experiences in clinical nutrition, community nutrition, and food service management. Cumulative experience totals 1000 hours. Malpractice/personal liability insurance, health insurance, lab coat, and physical exam required.

- HBSS 5241. **Preprofessional practice in clinical nutrition (3)**
Dr. Yung. Special fee: \$150.
- HBSS 5242. **Preprofessional practice in community nutrition (3)**
Dr. Yung. Special fee: \$150.
- HBSS 5243. **Research and Independent Practice (1)**
Dr. Yung and Dr. Schorow. Special fee: \$20.
- HBSS 5244. **Preprofessional practice in food service (2)**
Ms. Maro. Special fee: \$20.

HBSS 5333. Practicum in community service (1-2)

Faculty. Permission required. Prerequisite: HBSS 5034. Practical experiences in community, food, and nutrition programs.

HBSS 5513. Seminar in nutrition education: Theory and applications (1-2)

Professor Contento. Permission required. 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 cov-

ered in HBSS 5013. Required of nutrition education majors and doctoral students. Students may register for more than one semester.

HBSS 5593. **Seminar in nutrition in exercise and sport** (2–3) Ms. Dolins. Permission required. Prerequisites: Advanced Nutrition I or Applied Physiology I, a research design course. 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 interdisciplinary degree programs in this catalog.)

Advanced Seminars and Research

HBSS 5092. **Guided study in nutrition** (1–4) Faculty. Permission required. Opportunity for advanced students to investigate areas of special interest in nutrition.

HBSS 6500–HBSS 6501. **Seminar in nutrition** (3 per section) Professors Contento and Kushi. Permission required. For doctoral and other advanced students. Evaluative discussion of current literature on specific nutrition and food-related topics.

HBSS 6550–HBSS 6551. **Research seminar in nutrition** (2–3 per section) Professors Contento and Kushi. Permission required. Prerequisites: HBSS 5010–HBSS 5011 and HBSS 5014. Required of all Ed.M. and Ed.D. candidates. Students may register for more than one semester. Sections: (1) Professor Contento (2) Professor Kushi.

HBSS 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.

HBSS 7502. **Dissertation seminar in nutrition** (2) Professors Contento and Kushi. Permission required. Development of doctoral dissertations and presentation of plans for approval. Sections: (1) Professor Contento (2) Professor Kushi

HBSS 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) TBA

Applied Physiology and Nutrition

(Code: TZR)
Program Coordinators:
Professor Isobel R. Contento (Nutrition Education)
Professor Ronald DeMeersman (Applied Physiology)

Degree Offered:
Master of Science (M.S.)

Special Application Requirements/Information:
This program has ongoing admissions, and will review applications throughout the year.

The GRE General Test or Miller Analogies Test (MAT) is required. Prerequisites for admission include a strong academic background, including at least one course each in statistics, human 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-point Master of Science degree program. There are two main rationales for this program. First, both disciplines are concerned with the theory of energy intake, transformation, and liberation. Second, there are many practical problems that can be more satisfactorily addressed by attending to both nutrition and exercise than by attending to either one alone. Most prominent are health problems such as obesity, cardiovascular disease, diabetes, and osteoporosis.

Health professionals and educators need to know how these two aspects of lifestyle interact in children and adults to enhance health and prevent disease. Another application is to sports performance, physical fitness, and ergonomics. Coaches, athletes, teachers, and work physiologists can profit from an understanding of how nutrition and exercise interact to influence work capacity. To be effective in applying these concepts, professionals must be aware of appropriate educational and behavioral change theory and strategies.

The program prepares students to:

- Provide individual counseling and group instruction in nutrition and exercise
- Design, implement, and evaluate exercise and nutrition programs in schools, weight control centers, work sites, recreational agencies, 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 first-hand experience in collection of nutritional data. Courses in behavioral or educational methods provide insight into how applications are made in clinical or educational fieldwork settings. For clinical fieldwork track students, the fieldwork and associated integrative project develop 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.

There are two tracks from which students may choose. Students in the clinical fieldwork track participate in fieldwork in some setting that provides services/education in both exercise and nutrition, such as work site fitness programs, health promotion projects, etc. Contact Professor Contento for details.

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 programs in the New York area approved by the American Dietetic Association (ADA). Our ADA didactic pro-

gram advisor will work with students 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 4095-4519, Applied physiology and lab
- BBSR 5094-5194, Exercise testing and training plus lab
- HBSS 5010-5011, Advanced nutrition I and II
- BBSR 5095, Exercise and health
- HBSS 5014, Analysis of current literature and research in nutrition
- HBSS 4010, Food, nutrition and behavior
- HBSS 4013, Nutritional ecology
- HBSS 4014, Overview of nutrition service systems
- HBSS 5034, Clinical nutrition
- HBSS 5036, Nutrition counseling
- HBSS 5013, Strategies for nutrition education and health behavior change
- HBSS 5015, Assessing nutritional status and dietary behaviors
- BBSR 5582, Research design in movement sciences, or
- HUDM 5021, Methods of empirical research, or
- HBSS 6100, Measurement and program evaluation
- HBSS 5593, Seminar in nutrition in exercise and sport

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.

Students interested in other programs in Movement Science and Education (Motor Learning and Applied Physiology) should consult the program descriptions listed in the Department of Biobehavioral Studies.

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.

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. 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 physical education teaching position (part-time 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 and research experiences to demonstrate research competence and successfully complete the dissertation.

All doctoral students attend a continuous research semester during all semesters of their enrollment in the program. 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:

HBSR 5040. Curriculum designs in physical education (3)
Review of existing curriculum designs; traditional and new. Systematic development of curriculum plans.

HBSR 5041. Analysis of teaching in physical education (3)
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.

HBSR 5043. Administration of physical education and athletics (2-3)
Dr. Meyers. For prospective and in-service administrators. Preparation for carrying out administrative functions related to program planning, scheduling, budgeting, equipment and facilities, safety and liability, staff development, community relations, and others.

HBSR 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.

HBSR 5543. Seminar in physical education (2 or 3)
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.

HBSR 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.

HBSR 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

HBSR 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.

HBSR 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.

HBSR 5200. Fieldwork in movement sciences and education (1-4)
Permission required. For advanced students prepared to investigate problems.

HBSR 5582. Research design in movement sciences and education (3)
Basic concepts of research design and statistical analysis. Students learn to interpret articles and design projects.

HBSR 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).

HBSR 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.

HBSR 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.

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.

Behavioral Disorders (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., Ph.D. in Physical Disabilities

Cross-Categorical Studies

(Code: TEZ)
Program Coordinator: Professor Dennis Mithaug
Degree Offered: Ed.D.

Deaf or 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: Professors 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 Impairments, Deaf or Hard of Hearing, and Mental Retardation programs. Other program coordinators may arrange for applicants to have an admissions interview, if necessary.

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 (including autism), and 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 provides child-centered demonstrations of assessments, instructional practices, and follow-up evaluations that promote student-directed learning and performance across settings and time. Special education students work in collaboration with students from school psychology, health and nutrition as well as

clinical and counseling psychology programs. The Center is housed in excellent facilities at Teachers College and provides opportunities for practicum experience and research-based demonstrations of effective practice. The Center includes testing rooms, observation rooms, and audio and video recording capabilities.

The Center for Opportunities and Outcomes for People with Disabilities (formerly the Research and Demonstration Center for the Education of Children with Disabilities) provides support for research and scholarship that increases understanding of how to enhance prospects for inclusion and self-determination among individuals with special needs.

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 self-regulated 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® 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, hard of hearing, blind or visually impaired. Endowed fellowships and research assistantships are available to students who are preparing for

careers in the education of people with retardation.

Degree Requirements:

Master of Arts

Behavioral Disorders
Blindness and Visual Impairment
Deaf or 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 Blindness and Visual Impairment Program, 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 Hearing Impaired.

Core Departmental Requirements for Special Education M.A. Students

- HBSE 4002, Instruction and curriculum for students with disabilities
- HBSE 4015, Applied behavior analysis I—pedagogy, management and curriculum
- HBSE 4079, Language development and habilitation: the foundation
- HBSE 4082, Assessment and evaluation of exceptional learners
- HBSE 4092, Introduction to Foundations of Special Education Opportunity
- BSE 4300, Supervised Practicum in Educational Assessment of Exceptional Children (required for majors in TEB, TEM, and TEP)

Specialization Requirements, Behavioral Disorders (TEK):

- HBSE 4015, Applied behavior analysis I—Pedagogy, management and curriculum
- HBSE 4041, Education of persons with behavioral disorders (two courses)
- HBSE 4043, Applied behavior analysis II—Pedagogy, management and curriculum
- HBSE 4704X, Observation and student teaching in special education (3 points each term)
- HBSE 4704Y, Observation and student teaching in special education (3 points each term)

Specialization Requirements, Blindness And Visual Impairments (TEB):

- HBSE 4060, Nature and needs of people with blindness and visual impairment
- HBSE 4061, Anatomy and physiology of the visual system and related implications
- HBSE 4062, Methods and materials for people with blindness and visual impairment
- HBSE 4063, Transcription of literary braille

- HBSE 4064, Transcription of nemeth code
- HBSE 4700, Pre-Student teaching seminar (required for pre-service applicants)
- HBSE 4706, Observation/ Student teaching in special education: BVI
- HBSE 4880, Opportunities and outcomes for people with disabilities
- HBSE 5062, Orientation and mobility
- HBSE 5306, Advanced practica in special education: BVI
- HBSE 5063, Technology for people with visual impairments

Specialization Requirements, Deaf or Hard of Hearing (TED):

- HBSE 4070x, Psychosocial and cultural aspects of people who are deaf or hard of hearing, I
- HBSE 4070y, Psychosocial and cultural aspects of people who are deaf or hard of hearing, II
- HBSE 4071, Special methods of teaching people who are deaf or hard of hearing
- HBSE 4072, Development of language of people who are deaf or hard of hearing
- HBSE 4073, Teaching of speech to people 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 the—deaf or hard of hearing
- HBSE 4700, Observation and student teaching of the deaf or hard of hearing
- HBSE 4871, American Sign Language I
- HBSE 4872, American Sign Language II

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 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 4083, Education of young children with sensory impairments
- HBSE 4700, Pre-student teaching seminar
- HBSE 4701, Observation & student teaching in mental retardation—I
- HBSE 4701, Observation & student teaching in mental retardation—II
- 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, Education of young children with sensory impairments
- HBSE 4700, Pre-student teaching seminar
- HBSE 4703, Observation & student teaching in physical disabilities—I
- HBSE 4703, Observation & student teaching in physical disabilities—II

- HBSE 4880, 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 4010, Nature and needs of students with mental retardation
- HBSE 4011, Education of students with mental retardation
- HBSE 4015, Applied behavior analysis
- HBSE 4060, Blindness and visual impairment
- HBSE 4070, Nature and needs of persons who are deaf or hard of hearing
- HBSE 4071, Special methods—teaching children who are deaf or hard of hearing
- HBSE 4082, Assessment & evaluation of exceptional learners
- HBSE 4092, Introduction to foundations of special education opportunity
- HBSE 4880, Opportunities and outcomes for people with disabilities
- HBSE 5309, Advanced practica in special education: habilitation of persons with developmental 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, Problems and issues in 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, Problems and issues in special education
- HBSE 6001-I, Research in special education—quantitative/empirical-I
- HBSE 6001-II, Research in special education—qualitative methods-II
- HBSE 6001-III, Research in special education—single subject design-III
- 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
- 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:

Behavioral Disorders
Blindness and Visual Impairment
Cross-Categorical
Deaf or 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:
Behavioral Disorders
Mental Retardation
Physical Disabilities (including Blindness and Visual Impairments, Deaf or 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, Problems and issues in special education
- HBSE 6001-I, Research in special education—quantitative/empirical-I
- HBSE 6001-II, Research in special education—qualitative methods-II
- HBSE 6001-III, Research in special education—single subject design-III
- 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 4092, Introduction to foundations special education opportunity
- HBSE 5310, Advanced practica in special education: policy and administration in special education
- 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

- HBSE 6410, Advanced internship: policy and administration in special education

Specialization Requirements, Blindness and Visual Impairment (TEB):

- HBSE 5063, Technology for special learners
- HBSE 5306, Advanced practica in special education: blindness and visually impaired
- HBSE 5901, Problems in special education: mental retardation
- HBSE 5906, Problems in special education: blindness and visual impairment
- HBSE 6406, Advanced internship: blindness and visual impairment (two semesters)
- HBSE 6506, Advanced seminar: blindness and visual impairment (two semesters)

Specialization Requirements, Behavior Disorders (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, Hearing Impairment (TED):

- HBSE 5307, Advanced practica in special education: deaf or hard of hearing

- HBSE 5907, Problems in special education: deaf or hard of hearing
- HBSE 6070, Psychology of deafness
- HBSE 6407, Advanced internship: deaf or hard of hearing
- HBSE 6507, Advanced seminar: special education—deaf or hard of hearing

Specialization Requirements, Mental Retardation (TEM):

- HBSE 5301, Advanced practica in special education: mental retardation
- HBSE 5901, Problems in special education: mental retardation
- HBSE 6401, Advanced internship: mental retardation
- HBSE 6501, Advanced seminar—special education: mental retardation

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 (Spring, Summer Session A). Permission Required. Enrollment limited to 25 students. A first course in special education offered for students who are not special education majors. The course is a study of the nature, psychosocial and educational needs of individuals, across the life-span, with physical, mental, emotional, or sensory impairments. Emphasis 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 regular 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. For non-majors.

HBSE 4002. Instruction and curriculum for students with disabilities (2-3)
Professor Hickson. Approaches to educational placement, assessment, curriculum and instruction for students with disabilities with an emphasis on issues related to inclusion. Materials fee: \$10.

HBSE 4005. Computer applications in special education (2-3)
This course is intended to provide pre-service and in-service special education teachers with basic

information on computer applications with students 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 habilitation of infants, children, and youth with disabilities. Emphasis on strategies and materials to facilitate a continuum of parent and family participation. 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 incorporates individual, interpersonal, educational, and organizational perspectives. Special fee: \$10.

HBSE 4010. Nature and needs of persons with mental retardation (2-3)
Professor Hickson. Different degrees of mental retardation and their causes and foundations of educational programming, psychological bases of suitable curricula and methods. Materials fee: \$10.

HBSE 4011. Education of persons with mental retardation (2-3)
Dr. Culverhouse. Instructional strategies and program development for persons with mental retardation at different maturational levels. Organization and planning of activities and materials; curriculum selection, analysis, and development. 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 adaptation, methods, and materials for instruction; school programming for students with disabilities 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. Nature and needs of people with blindness and visual impairment (2-3)
Dr. Stolarski. HBSE B majors must enroll for 3 points. Introduction to the education of people with blindness and visual impairment; 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. Methods and materials for people with blindness and visual impairment (2-3)
Dr. Stolarski or Ms. Saunders. Prerequisite: proficiency in Braille and typing, or HBSE 4063 (may be taken concurrently). Learning theories; programs, methods, materials, and aids in the education of blind and visually impaired learners. Observation and clinical practice in assessment, development of instructional objectives, and adaptation of materials. Special fee: \$40.

HBSE 4063. Literary Braille transcription (3)
Ms. Amato. Corequisites: HBSE 4060 and HBSE 4061. Research and practice in communication skills and media. Transcription and reading literary Braille; methods for teaching aural and tactile reading. Special fee: \$40.

HBSE 4064. Nemeth code and technology (2-3)
Ms. Amato. Prerequisite: HBSE 4063 or Library of Congress Certification in Braille Transcription. Corequisite: HBSE 4062. Transcription of Nemeth code Braille; tactile graphics; mathematics and science methods and media. Special fee: \$40.

HBSE 4070. Psychosocial and cultural aspects of people who are deaf or hard of hearing I, II (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. Special methods of teaching people who are deaf or hard of hearing I, II (2-3)

Dr. Berchin-Weiss (I), Ms. Hartman (II). 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/language arts subject areas. Materials fee: \$10.

HBSE 4072. Development of language of people who are deaf or hard of hearing I, II (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 people 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. Assessment and evaluation of learners with exceptionalities (2-3)

Dr. Stolarski. Enrollment limited to 20 per term. Assessment and evaluation procedures as related to implementation of educational plans for learners with exceptionalities. Applications of assessment data in instructional programs for children with impairments: cross- categorical. Special fee: \$50. (This course is a prerequisite for HBSE 4300), which is now offered in the spring.

HBSE 4083. Education of young children with sensory impairments (2-3)

Dr. Stolarski. Diagnostic theories and techniques of teaching young children with multiple sensory impairments; sensory motor, cognitive, language, and adaptive skills development. Team approaches, including involvement of parents. Materials fee: \$30.

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: \$10.

HBSE 4300. Supervised practicum in the educational assessment of exceptional children (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.

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)** (pre-service and first year teachers)
- HBSE 4701-I. **Mental retardation I (3)** (pre-service and first year teachers)
- HBSE 4701-II. **Mental retardation II (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-I. **Deaf or hard of hearing I (4)**
- HBSE 4707-II. **Deaf or hard of hearing II (4)**
- HBSE 4709. **Habilitation (3)**
- HBSE 4710. **Mental retardation/sensory impairment (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 colloquium for people with disabilities (0-2)

(Section 001 Colloquium, Section 002 Annual Conference). 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. Annual Spring conference is offered for credit. Students enrolling for Section 001 (1) must attend biweekly colloquia in fall and spring.

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, environmental awareness, and orientation to the environment from infancy through adolescence. Study of validated mobility techniques. Practice of techniques under conditions simulating blindness; observations and practice in preparing and presenting material. Materials fee: \$20.

HBSE 5063. Technology in the education of people with disabilities (2-3)

Dr. Stolarski. Technological aids and devices in the education of people with disabilities, including those with blindness or visual impairments, with instruction in use of electronic mobility aids, Optacon, low vision aids, electronic Braille, and other auditory and tactual devices. Field trips, demonstrations, and laboratory sessions.

HBSE 5072. Language and communication for persons 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. Pre-service internships arranged. Students submit reports analyzing experiences.

- HBSE 5300. **General** (1-6)
Faculty/Staff.
- HBSE 5301. **Mental retardation** (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)
Dr. Stolarski.
- HBSE 5307. **Deaf or 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** (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.
- HBSE 5907. **Deaf or 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.
- 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 II and III in the same semester. Special fee: \$30.

- HBSE 6001-I. **Research and empirical design** (2-4)
Professor Hickson, Fall.
- HBSE 6001-II. **Qualitative approaches** (2)
Professor Kretschmer, Spring.
- HBSE 6001-III. **Single case studies** (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** (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.
- HBSE 6407. **Deaf or 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** (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.
- HBSE 6507. **Deaf or 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 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 (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 or 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.

HBSE 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. For financial assistance, preference is given to students who meet the priority deadline of January 15.

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 nationally-recognized assessments may need to take additional conversational ASL courses. An interview may be scheduled by contacting the Program coordinators.

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 *Modern Languages for Communication* as a model.

Students will be prepared to become professionals who approach the profession of teaching ASL as a foreign language in a highly scholarly manner and as a contextualized, investigatory, cultural, and problem-solving event with learners who typically have hearing, are in regular

education programs and possess a wide range of cognitive, social, and academic abilities and diverse cultural backgrounds. They will be able to consume, apply, and generate research on the instructional process as presented formally within journals and texts on the teaching of ASL and other second languages, communication skills, deaf studies, curriculum design, and the cognitive, social and affective development of the learner.

Degree Requirements:

The Master of Arts Program in the Teaching of ASL consists of a minimum of 40 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 Masters 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&TY 4052, Designing curriculum and instruction, or
- A&HL 4021, Foundations of bilingual and bicultural education, or
- A&HL 4127, Bilingual-bicultural curriculum: Multilinguals

Pedagogy (3):

- C&TY 4005, Principles of teaching and learning, or
- A&HL 4049, Foreign language teaching: Styles and methods, or
- A&HL 4076, TESOL methodologies for K–12

Learner Characteristics (3):

- HBSK 4029, Theories of human cognition and learning, or
- HBSK 4020, Theories of human development, or

- HBSK 4022, Developmental psychology: Childhood, or
- HBSK 4023, Developmental psychology: Adolescence

Anthropological Foundations (3):

- MSTF 4003, American culture and education, or
- MST 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 persons who are deaf or hard of hearing, I, II.
- 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
- HBSE 4072, Teacher-as-Researcher

Assessment (2):

- HBSE 4307, Assessment in ASL and deaf studies, or
- A&HL 4088, Second-language testing

Student Teaching/Practica

(6 credits)

HBSE 4707, Observation and student teaching of ASL, I, II

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 American Sign Language 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
Politics and Education
Sociology and Education

Faculty:

Professors:

J. Lawrence Aber (Developmental Psychology/National Center for Children in Poverty {part-time})
John B. Black (Cognitive Studies in Education/ Instructional Technology and Media)
Lois Bloom (Developmental Psychology)—Emeritus
Jeanne Brooks-Gunn (Developmental Psychology)
Robert L. Crain (Politics and Education/Sociology and Education)—Emeritus
Herbert P. Ginsburg (Developmental Psychology/Cognitive Studies in Education)
Deanna Kuhn (Developmental Psychology/Cognitive Studies in Education)
Gary Natriello (Sociology and Education)
Ernst Z. Rothkopf (Cognitive Studies in Education/ Instructional Technology and Media)
Joanna P. Williams (Cognitive Studies in Education)
Richard M. Wolf (Measurement, Evaluation, and Statistics)—Emeritus

Adjunct Professors:

Hugh F. Cline (Sociology and Education)
Alan R. Sadovnik (Sociology and Education)

Associate Professors:

Peter W. Cookson, Jr. (Adult and Continuing Education/Sociology and Education)
James E. Corter (Cognitive Studies in Education/Measurement, Evaluation, and Statistics)
Sunya S. Luthar (Developmental Psychology)
Jane A. Monroe (Measurement, Evaluation, and Statistics)
H. Jane Rogers (Measurement, Evaluation, and Statistics)

Adjunct Associate Professors:

Julia A. Graber (Developmental Psychology)
Elizabeth C. Vozzola (Developmental Psychology)
Bruce L. Wilson (Sociology and Education)

Assistant Professors:

Lawrence T. DeCarlo (Measurement, Evaluation, and Statistics)
Clea Fernandez (Developmental Psychology/Cognitive Studies in Education)

Adjunct Assistant Professors:

Ivo Antoniazzi (Measurement, Evaluation, and Statistics)
Meryle M. Kaplan (Developmental Psychology)
John N. Larson (Cognitive Studies in Education)
Laurie Miller-McNeill (Politics and Education)
Dale T. Snauwaert (Politics and Education)

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 sci-

entists 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

(Code: TKE)

Program Coordinator: Professor James E. Corter

Degrees Offered:

Educational Psychology
Master of Arts (M.A.)
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 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 learning, and experimental approaches to learning, memory,

language, reasoning, and problem solving. The culminating experience for master's students in this program is to conduct an empirical research study in the area of cognition or learning.

Concentration in Intelligent Technologies:

The Intelligent Technologies concentration offers a program of study for students whose interests include developing cognitive 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 disabilities, 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 job-related 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

Core Courses (9 points):

- HUDK 4029, Theories of human cognition and learning
- HUDK 4080, Educational psychology
- HUDK 5023, Cognitive development

Statistics/Research Design

(3 points):

At least one of the following:

- HUDM 4120, Basic concepts in statistics
- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis
- HUDM 5123, Experimental design
- HUDM 5021, Methods of empirical research

Research (3 points):

- HUDK 5324, Research work practicum or, by permission, a 6000-level research work practicum

Breadth Requirement

(4–6 points):

At least two of the following:

- A&HL 4000, Study of language
- A&HF 4081, Philosophies of education
- MSTU 4008, Information technology and education
- MSTU 4036, Hypermedia and education
- MSTU 4133, Cognition and computers
- MSTF 4010, Social context of education
- ORLJ 4005, Organizational psychology
- HBSK 4075, Brain and behavior
- BBSQ 4040, Speech and language disorders

Specialized Courses

(11–13 points):

Selected in consultation with an advisor, and focusing on one of the following concentrations: Cognition and Learning:

- HUDK 5034, Theories of human cognition and learning; Research methods and applications
- HUDK 4015, Psychology of thinking
- HUDK 4027, Development of mathematical thinking
- HUDK 5091, Applied psycholinguistics
- HUDK 5024, Language development
- HUDM 5058, Choice and decision making
- HUDK 6620, Special topics in developmental psychology
- HBSK 5096, Psychology of memory

Intelligent Technologies:

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

Reading Research:

- HUDK 4010, Psychology of reading
- HUDK 5024, Language development
- HUDK 5080, Experimental psychology of schooling and reading
- HUDK 5091, Applied psycholinguistics
- HUDK 6620, Special topics in developmental psychology
- HUDK 5090, Psychology of language and reading
- HUDK 6095, Critical review of current journals in psychology
- HBSK 5099, Theories of cognitive processes in writing

Cognitive Studies of Educational Practice:

- HUDK 4035, Technology and human development
- HUDK 4074, Reading comprehension strategies and study skills
- HUDK 4127, Developmental psychology for educational reform
- HUDK 5097, Psychology of instruction
- HUDK 6620, Special topics in developmental psychology
- HUDF 4021, Sociology of education
- HUDM 5055, Evaluation of institutions, programs, and curricula

Training and Performance in the Workplace:

- HUDK 4035, Technology and human development
- HUDK 5039, Design of intelligent learning environments
- HUDK 5198, Psychology of instructional systems design
- HUDK 6620, Special topics in developmental psychology
- HUDF 5020, Methods of social research: Survey methods
- HUDM 5055, Evaluation of institutions, programs, and curricula
- MSTU 5030, Intelligent computer assisted instruction

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 perfor-

mance support system, or a related research study.

Master of Education-60 points

Core Courses (9 points):

- HUDK 4029, Theories of human cognition and learning
- HUDK 4080, Educational psychology
- HUDK 5023, Cognitive development

Statistics/Research Design (12+ points):

- HUDM 4120, Basic concepts in statistics (if no undergraduate statistics)
- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis
- HUDM 5021, Methods of empirical research
- HUDM 5059, Psychological measurement

Research (6 points):

- HUDK 5324, Research work practicum or, by permission, a 6000-level research work practicum.

Breadth Requirement (6 points):

At least two of the following:

- A&HL 4000, Study of language
- A&HF 4081, Philosophies of education
- MSTU 4008, Information technology and education
- MSTU 4036, Hypermedia and education
- MSTU 4133, Cognition and computers
- MSTF 4010, Social context of education
- ORLJ 4005, Organizational psychology
- HBSK 4075, Brain and behavior
- BBSQ 4040, Speech and language disorders

Specialized Courses (33–36 points): Selected in consultation with an advisor, and focusing on one of the following concentrations:

Cognition and Learning:

- HUDK 5034, Theories of human cognition and learning: Research methods and applications
- HUDK 4015, Psychology of thinking
- HUDK 4027, Development of mathematical thinking
- HUDK 5024, Language development
- HUDM 5058, Choice and decision making
- HUDK 5091, Applied psycholinguistics
- HBSK 5096, Psychology of memory
- HUDK 6620, Special topics in developmental psychology

Intelligent Technologies:

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

Reading Research:

- HUDK 4010, Psychology of reading
- HUDK 5024, Language development
- HUDK 5080, Experimental psychology of schooling and reading
- HUDK 5090, Psychology of language and reading
- HUDK 5091, Applied psycholinguistics
- HUDK 6095, Critical review of current journals in psychology
- HUDK 6620, Special topics in developmental psychology
- HBSK 5099, Theories of cognitive processes in writing

Cognitive Studies of Educational Practice:

- HUDK 4035, Technology and human development

- HUDK 4074, Reading comprehension strategies and study skills
- HUDK 4127, Developmental psychology for educational reform
- HUDK 5097, Psychology of instruction
- HUDK 6620, Special topics in developmental psychology
- HUDF 4021, Sociology of education
- HUDM 5055, Evaluation of institutions, programs, and curricula

Training and Performance in the Workplace:

- HUDK 4035, Technology and human development
- HUDK 5039, Design of intelligent learning environments
- HUDK 5198, Psychology of instructional systems design
- HUDK 6620, Special topics in developmental psychology
- HUDF 5020, Methods of social research: Survey methods
- HUDM 5055, Evaluation of institutions, programs, and curricula
- MSTU 5030, Intelligent computer assisted instruction

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

General Psychology (12 points):
One course each in 4 of the following areas:

1. Development:
 - HUDK 5022, Emotional development
 - HUDK 5023, Cognitive development
 - HUDK 5024, Language development, or
 - HUDK 5029, Personality development and socialization across the life span
2. Personality:
 - CCPX 5032, Personality and psychopathology
 - CCPX 5034, Developmental psychopathology, or
 - G 4003, Personality
3. Social Bases of Behavior:
 - ORLJ 5540, Proseminar in social psychology, or
 - G 4006, Social psychology
4. Measurement:
 - HUDK 5059, Psychological measurement
5. Biological Bases of Behavior:
 - HBSK 4075, Brain and behavior
 - HBSK 5068, Introduction to neuropsychology
 - HBSK 5070, Neural bases of language and cognitive development
 - BBSQ 4043, Human nervous system, or
 - G 4004, Physiological psychology

Statistical and Research Methodology (15 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5059, Psychological measurement
- HUDM 5122, Applied regression analysis
- HUDM 5123, Experimental design, or
- HUDM 6122, Multivariate analysis I

Core Courses (minimum of 18 points):

- At least 6 of the following:
- HUDK 4027, Development of mathematical thinking
 - HUDK 4029, Theories of human cognition and learning
 - HUDK 4080, Educational psychology
 - HUDK 5023, Cognitive development
 - HUDK 5034, Theories of human cognition and learning: Research methods and applications
 - HUDK 5197, Psychology of training in business and industry
 - HUDK 5198, Psychology of instructional systems design
 - HUDK 6095, Critical review of current journals in psychology
 - HUDK 5090, Psychology of language and reading
 - MSTU 4133, Cognition and computers

Research Apprenticeship (6 points):

- Two semesters in a research practicum:
- HUDK 6529, Research practicum in cognitive development
 - HUDK 6539, Research practicum in educational psychology, cognition, and learning
 - HUDK 6592, Advanced research seminar: learning and instruction
 - HUDK 6598, Advanced research seminar: Instructional theory

Special Seminars (minimum of 9 points):

- HUDK 6620, Special topics in developmental psychology (taken during both first and second years)
- HUDK 7502, Dissertation seminar

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

General Psychology (12 points):
One course each in 4 of the following areas:

1. Development:
 - HUDK 5022, Emotional development
 - HUDK 5023, Cognitive development
 - HUDK 5024, Language development
 - HUDK 5029, Personality development and socialization across the life span
2. Personality:
 - CCPX 5032, Personality and psychopathology
 - CCPX 5034, Developmental psychopathology
 - G 4003, Personality
3. Social Bases of Behavior:
 - ORLJ 5540, Proseminar in social psychology
 - G 4006, Social psychology
4. Measurement:
 - HUDK 5059, Psychological measurement
5. Biological Bases of Behavior:
 - HBSK 4075, Brain and behavior
 - HBSK 5068, Introduction to neuropsychology
 - HBSK 5070, Neural bases of language and cognitive development
 - BBSQ 4043, Human nervous system
 - G 4004, Physiological psychology

Statistical and Research Methodology (15 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5059, Psychological measurement
- HUDM 5122, Applied regression analysis

- HUDM 5123, Experimental design
- HUDM 6122, Multivariate analysis I

Core Courses (minimum of 24 points):

- At least 8 of the following:
- HUDK 4027, Development of mathematical thinking
 - HUDK 4029, Theories of human cognition and learning
 - HUDK 4080, Educational psychology
 - HUDK 5023, Cognitive development
 - HUDK 5034, Theories of human cognition and learning: Research methods and applications
 - HUDK 5090, Psychology of language and reading
 - HUDK 5197, Psychology of training in business and industry
 - HUDK 5198, Psychology of instructional systems design
 - HUDK 6095, Critical review of current journals in psychology.
 - MSTU 4133, Cognition and computers

Research Apprenticeship (6 points):

- Two semesters in a research practicum
- HUDK 6529, Research practicum in cognitive development
 - HUDK 6539, Research practicum in educational psychology, cognition, and learning
 - HUDK 6592, Advanced research seminar: Learning and instruction
 - HUDK 6598, Advanced research seminar: Instructional theory

Special Seminars (minimum of 9 points):

- HUDK 6620, Special topics in developmental psychology (taken during both first and second years)
- HUDK 7502, Dissertation seminar

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. Theories of human cognition and learning (3)

Professors Black and Rothkopf. Cognitive and information-processing approaches to attention, learning, language, memory, and reasoning.

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. Theories of human cognition and learning: Research methods and applications (3)

Professors Rothkopf and 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 (3)

Professor Williams. Limited to candidates in psychology; others by permission. Critical review of current journals in psychology and education, analysis of articles, discussion of general trends in current theoretical and research literature, and guidance in preparing manuscripts for publication in peer-reviewed journals.

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

HUDK 4120. Empirical study of human development (3)

Professor Fernandez. An introduction to the research methods that have been employed by cognitive and developmental psychologists, as well as an overview of how these methods have been applied

and the kinds of knowledge they have yielded.

HUDK 5024. Language development (2-3)

Faculty. Survey of research and theory in the development of language, beginning with communication and the origins of language in infancy and emphasizing acquisition of the forms of language in relation to their content and use.

HUDK 5080. Experimental psychology of schooling and reading (2-3)

Professor 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)

Professor Rothkopf. 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 case-based 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 Ginsburg or Kuhn. Permission required. Prerequisite: HUDK 5023. 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)
Professor Rothkopf. 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)
Professor Rothkopf. 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 6529. **Research practicum in cognitive development** (2–3)
Professor Kuhn. Permission required.

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 Pevery. 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)

HUDK 6902. **Advanced research and independent study** (1–3)

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 & Media:
• MSTU 4008. **Information technology and education** (3)
• MSTU 4019. **Social cognition and communication** (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 5183. **Designing educational video** (3)
• MSTU 5190. **Preproduction of educational video programs** (3)
• MSTU 5191-5192. **Educational video production I and II** (3–4)
• MSTU 5193. **Design and evaluation of experimental education video** (2–3)
• MSTU 5194. **Models of interactive learning** (3–4)
• MSTU 6030. **Software evaluation** (3)

Psychology: Developmental

(Code: TKA)
Program Coordinator: Professor Suniya S. Luthar

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 part-time study.

In accordance with individual interests and objectives, students acquire familiarity with basic theoretical and research orientations as well as exposure to substantive knowledge in the areas of cognitive, language, personality and social functioning and development. Opportunity exists for the study of deviant as well as normal psychological functioning within a developmental framework.

Students may register for independent study in order to undertake theoretical or empirical research projects or fieldwork. Students whose goal is to acquire professional skills in clinical or counseling psychology may enroll in introductory course offerings, which in many cases can be applicable if the student is later admitted to one of the more advanced master’s or doctoral programs in these areas.

In order to accommodate the diverse aims of individual students, a considerable degree of flexibility has been built into the course of study leading to the M.A. degree. An attempt has been made to minimize specific course requirements, and the student will find that there is a good deal of freedom to choose from among the many offerings provided by Teachers College and the Columbia University Graduate faculties. In consultation with an advisor, students may create an individually tailored program of study, or may enter a concentration in Developmental

tal Studies for Educators, or Risk and Prevention.

The course of study has four 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 psychology programs.
- Broad and basic areas of scholarship.

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

Either 32 points and a special project or 30 points and a formal thesis.

Basic Courses (12 points):

- HUDK 4120, Empirical study of human development
- HUDK 5023, Cognitive development
- HUDK 5121, Personality development and socialization in early childhood

And either of the following:

- HUDK 5034, Development and psychopathology: Atypical contexts and populations
- HUDK 4127, Developmental psychology for educational reform

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, 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.

Concentrations: Within the constraints described above, the student may design a program of study in coordination with an advisor, or concentrate in *Risk 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). For those with an interest in Educational Policy, a concentration in this area is offered in collaboration with the programs in Sociology and Education, and Politics in Education.

Developmental Psychology

(Code: TKD)

Program Coordinator: Professor Suniya Luthar

Degree Offered:

Doctor of Philosophy (Ph.D.)

Special Application Requirements/Information:

This program accepts applications for fall semester only. GRE and Subject Test in Psychology are required. 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 Develop-

mental 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 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 each 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: Four basic courses in developmental psychology, one in each of the following areas—cognitive development, social/emotional development, empirical methods, and psychopathology. Two courses in statistics—HUDM 4120, Basic concepts in statistics; and HUDM 4122, Probability and statistical inference. A research seminar, HUDK 6620, Special topics in developmental psychology. One course (3 more to be taken in the second year) of the general psychology requirement.

Second Year of Study: Two advanced developmental courses in cognitive development, social/emotional development, empirical methods, or psychopathology. Two statistics courses—HUDM 5122, Applied regression analysis; and HUDM 5123, Experimental design. Continued enrollment in HUDK 6620, Special topics in developmental psychology. Three courses satisfying the general psychology requirement specified above. Other requirements include completion of an empirical paper (concomitant with enrollment in HUDK 6901, Advanced research and independent study in developmental psychology).

Third Year of Study: Two statistics courses—HUDM 6122, Multivariate analysis I; and HUDM 6123, Multivariate analysis II. Continued enrollment in HUDK 6620, Special topics in developmental psychology. Other requirements include a theoretical paper (concomitant with enrollment in HUDK 6901, Advanced research and independent study in developmental psychology) and certification examination. 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. Completion of an approved doctoral dissertation.

Courses:

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)
Dr. Graber. 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 mar-

riage, 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 4120. The empirical study of human development (3)
Professor Fernandez. 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 4121. 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 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 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 5021. Aesthetic development (2–3)
Faculty. Investigation of the genesis of aesthetic development from childhood to maturity; special attention given to making and responding in the arts and to the role of the imagination in stretching the boundaries of knowledge.

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. Special fee: \$40.

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 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 early childhood. Comparison of typical and atypical pathways in early social-personality development. Analysis of the logic and method of empirical studies of early development.

HUDK 5122. Psychological factors in later life (3)

Faculty. Research findings, theoretical conceptions, and unresolved issues with respect to cognitive, social, and personality functioning in later life.

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. Provides a multi-disciplinary perspective on child and family policy. Also provides a foundation of knowledge concerning the role of child and family perspectives in informing policy. Prerequisites: Any 2 of the following: HUDF 4000; HUDF 4024; HUDK 4120; HUDK 4121; C&T 4113; C&T 5113

HUDK 6520. Seminar in social development (3)

Faculty. Permission required. How people become socialized and how psychology deals with the process in terms of developmental concepts. Special fee: \$25.

HUDK 6523. Seminar in cognitive development (1–3)

Professor Ginsburg or Kuhn. Permission required. Prerequisite: HUDK 5023. Advanced topics in research and theory in cognitive development.

HUDK 6524. Seminar in language development (3)

Faculty. Permission required. Prerequisite: HUDK 5024. Analysis of current research in the study of language development. Individual exploration of particular research problems.

HUDK 6529. Research practicum in cognitive development (2–3)

Professor Kuhn. Permission required.

HUDK 6572. Research in applied educational psychology: Mathematics reasoning and mathematics education (3)

Professor Ginsburg. Permission required. Students participate in ongoing research.

HUDK 6620. Special topics in developmental psychology (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)

HUDK 6901. Advanced research and independent study (1–3 each course)

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 educational research bureaus and testing organizations. In addition to the satisfactory completion of course work, an integrative project is required.

Degree Requirements:
Master of Science-32 points

Statistics (21 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis
- HUDM 5123, Experimental design
- HUDM 6122, Multivariate analysis I
- HUDM 6123, Multivariate analysis II
- W 4105, Probability; and W 4107, Statistical inference are

taken at Columbia University's Graduate School of Arts and Sciences.

Computer Language (3 points): Selected in consultation with an advisor.

Research Design (3 points): Selected in consultation with an advisor. Possible courses include HUDM 5021, Methods of empirical research; HUDM 5055, Evaluation of institutions, program, and curricula; and HUDF 5020, Methods of social research: Survey methods.

Electives (5 points): Selected in consultation with an advisor and within the areas of Management Science, Economics, Public Health, Computer Science, Psychology, and Sociology.

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

Culminating Experience: Special project.

Measurement and Evaluation

(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. A working knowledge of calculus 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
- HUDM 5055-5056, Evaluation of institutions, programs, and curricula I and II
- HUDM 6051-6052, Theory and practice of test construction I and II; plus an additional 3 points in evaluation

Quantitative Methods (15 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis
- HUDM 5123, Experimental design
- HUDM 6122, Multivariate analysis I; and 3 points in data management

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):

- HUDM 5021, Methods of empirical research
- HUDM 5250, Research practicum in measurement and evaluation

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 (25 points):

- HUDM 5059, Psychological measurement
- HUDM 5124, Multidimensional scaling and clustering
- HUDM 5125, Psychological scaling
- HUDM 5250, Research practicum in measurement and evaluation
- HUDM 6051-6052, Theory and practice of test construction I and II
- HUDM 6055, Latent structure analysis

And at least 3 points selected from the following:

- HUDM 5055-5056, Evaluation of institutions, programs, and curricula I and II
- HUDM 5058, Choice and decision making
- HUDM 5550, Current issues in measurement and evaluation
- CCPJ 5062, Career counseling and development

Quantitative Methods and Research Design (28 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5021, Methods of empirical research
- HUDM 5122, Applied regression analysis
- HUDM 5123, Experimental design
- HUDM 6026, Statistical treatment of mass data
- HUDM 6122-6123, Multivariate analysis I and II
- HUDM 7500, Dissertation seminar
- HUDM 8900, Dissertation advisement
- Also W4105, Probability; and W4107, Statistical infer-

ence, 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 (31 points):

- HUDM 5059, Psychological measurement
- HUDM 5055-5056, Evaluation of institutions, programs, and curricula I and II
- HUDM 5250, Research practicum in measurement and evaluation
- HUDM 5550, Current issues in measurement and evaluation
- HUDM 6051-6052, Theory and practice of test construction I and II
- HUDM 6052, Latent structure analysis

And at least 3 points selected from the following:

- HUDM 5058, Choice and decision making
- HUDM 5552, Problems and procedures in the measurement of attitudes
- HUDM 5553, Questionnaire construction
- HUDM 5554, Performance and proficiency evaluation.

Quantitative Methods and Research Design (31 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5021, Methods of empirical research
- HUDM 5122, Applied regression analysis
- HUDM 5123, Experimental design
- HUDM 5124, Multidimensional scaling and clustering
- HUDM 5125, Psychological scaling
- HUDM 6122-6123, Multivariate statistics I and II
- HUDM 7500, Dissertation seminar
- HUDM 8900, Dissertation advisement; and a data management course

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 psychology, many of which are required or recommended in the program guides obtainable from the department office.

Measurement and Evaluation

HUDM 4050. **Introduction to measurement** (2-3)
Professor 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 5021. **Methods of empirical research** (3)
Professor DeCarlo. 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 5055-HUDM 5056. **Evaluation of institutions, programs, and curricula** (3 each)
Faculty. Permission required. Prerequisites: HUDM 4050 and HUDM 4122 or equivalent. Combined lecture, discussion, laboratory, and fieldwork course on the problems, issues, and procedures involved in designing and carrying out evaluation studies.

HUDM 5058. **Choice and decision making** (3)
Professor Corter. Prerequisite: HUDM 4122 or equivalent. Surveys quantitative models of individual decision making, from the introduction of the notion of "utility" by Daniel Bernoulli through current models such as Tversky and Kahneman's "Prospect Theory." The focus is on psychological or descriptive models of how people make decisions, although methods of rational decision analysis are briefly discussed.

HUDM 5059. **Psychological measurement** (3)
Professor DeCarlo. Open to doctoral and Ed.M. students in psychology; others only by permission. A previous course in statistics or measurement is recommended. 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)
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 5552. **Problems and procedures in the measurement of attitudes** (1)
Faculty. Prerequisite: HUDM 4050 or equivalent. Half-semester course. Introduction to Likert and equal appearing interval scale methods.

HUDM 5553. **Questionnaire construction** (1)
Faculty. Prerequisite: HUDM 4050 or equivalent. Half-semester course. Introduction to item writing and the construction of questionnaires and interview schedules.

HUDM 5554. **Performance and proficiency evaluation** (1)
Faculty. Prerequisite: HUDM 4050 or equivalent. Half-semester course. Introduction to measures for assessing performance and proficiency.

HUDM 6051-HUDM 6052. **Theory and practice of test construction** (3 each)
Professor Rogers. Permission required. Prerequisites: HUDM 5059, HUDM 5122, or equivalents. Psychometric theory underlying test construction and the application of theory to making tests.

HUDM 6055. **Latent structure analysis** (3)
Professor DeCarlo. Permission required. Prerequisites: HUDM 6122 and HUDM 6052. Study of latent structure analysis, including measurement models for latent traits and latent classes, 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)
Professors Corter and Rogers. 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: \$75.

HUDM 5123. **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 5125. **Psychological scaling** (3)
Professor DeCarlo. Permission required. Prerequisites: HUDM 4122 and HUDM 5122 or equivalent. Methods for deriving numeric scales from psychological data. Topics include Thurstonian and Rasch approaches to scaling, analysis of paired comparisons, psychological measurement, additive conjoint measurement, and foundations of measurement.

HUDM 6026. **Statistical treatment of mass data** (3)
Professor Corter. Prerequisite: HUDM 5123 or equivalent. Examines problems involved in preparing and analyzing large data sets. Includes a survey of data manipulation and statistical tools in SAS (Statistical Analysis System). Optional topics: introduction to numerical methods and survey of "data mining" tools.

HUDM 6122. **Multivariate analysis I** (3)
Professor Monroe. Permission required. Prerequisite: HUDM 5122 or equivalent background; 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, and SPSS programs.

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. Use of SPSS programs.

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)
HUDM 4902. **Research and independent study: Applied statistics** (1-3)
HUDM 6900. **Advanced research and independent study** (1-3)
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.

Politics and Education (Code: TFG)

Program Committee: Professor Dale Mann (Educational Administration), and Professor Robert McClintock (History and Education)
Program Coordinator: Professor Robert McClintock. For additional information call (212) 678-3391.

Degrees offered:

Master of Arts (M.A.)
Master of Education (Ed.M.)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)
Educational Policy concentration (option available)

Special Application

Requirements/Information:
The GRE general is required for all doctoral applicants. Doctoral applicants are reviewed for Fall term only.

Program Description:

The Politics and Education program is a base for students who wish to study educational policy, whether federal, state or local, from pre-school to higher and adult education. Students learn not only about the formulation of policies, but how to evaluate their effectiveness. The program provides training and hands-on experience in evaluation methods, and both quantitative and qualitative methods.

Students in the program pursue the study of policies affecting K-12 public education, four-year and community colleges, pre-school programs, parenting and parent-school coordination, technology in education, school choice, charter schools, school restructuring, and teacher empowerment.

The program is managed by the Committee on Politics and Education, headed by Prof. Dale Mann of Educational Administration, and Prof. Robert McClintock of History and Education who also serve as faculty advisors. Students are encouraged to take related course work with the extended "Faculty in Politics and Education", with professors representing numerous departments at Teachers College, including school and classroom reform with Gary Natriello; school-business partnerships and school-to-work programs with Thomas Bailey and Terry Orr; state and federal policy making with Dorothy Shipp and Thomas Sobol; child and adolescent development with Jeanne Brooks-Gunn and Suniya Luthar; school finance

with Craig Richards; school choice with Peter Cookson; international education policy with Gita Steiner-Khamsi; special education policy with Dennis Mithaug; health policy with John Allegrante and Barbara Wallace; non-public schooling and charter schools with Pearl Kane, and law and education with Jay Heubert.

Students choose policy courses offered throughout Teachers College as well as the various other schools of Columbia University including the Law School, the School of International and Public Affairs, and the graduate departments of Sociology, Political Science and History.

Students are also encouraged to gain teaching experience, as this is integral for anyone serious about affecting change in the educational policy arena. Many students attend the program part-time while teaching in public or private schools. Applicants interested in both teacher certification and policy study are encouraged to apply to the 40-point pre-service M.A. in Curriculum and Teaching or one of the high school education programs, following up with the Ed.M in Politics and Education.

Politics and Education students may also choose to participate in the Educational Policy Concentration if they wish to further hone their policy skills.

Degree Requirements:

Master of Arts-32 points

Required Courses (9 points):
Select from the following:

- HUDF 4000, Education and public policy
- HUDF 4040, American politics and education
- HUDF 4042, Comparative politics and education
- HUDF 4043, Political thought and education

- HUDF 5042, Urban politics and education
- HUDF 5045, Race, ethnicity and US educational policy
- HUDF 5046, Education and politics in Western thought
- ORLA 4030, Ethical issues in educational leadership
- ORLA 4040, Education policy decision making
- ORLA 4042, Role of the state in education, governance, policy and practice
- ORLA 4086, Law and educational institutions: Social policy—student personnel
- ORLA 5012, Community politics, community policies and administrators
- ORLA 5541, Federal politics, federal policies and administrators
- ORLA 5645, Topics in policy planning and implementation: Intergovernmental relationships
- ORLA 5646, Topics in policy planning and implementation: Concepts and techniques

Statistics (3 points):

HUDM 4122, Probability and statistical inference; or HUDM 5122, Applied regression analysis.

Methodology (3 points):

One of the following:

- HUDF 5020, Methods of social research: Survey methods
- HUDF 5021, Methods of social research: Evaluation methods
- HUDF 5029, Sociological research methods in educational settings

Additional Courses (17 points):

In consultation with an advisor, policy-related courses are selected from Teachers College, the Graduate School of Arts and Sciences, and the School of International and Public Affairs. At least 3 courses must be from outside the department.

Culminating Experience: Master's examination.

Master of Education-60 points

Required Courses (12 points):

Select from the following:

- HUDF 4000, Education and public policy
- HUDF 4040, American politics and education
- HUDF 4042, Comparative politics and education
- HUDF 4043, Political thought and education
- HUDF 5042, Urban politics and education
- HUDF 5045, Race, ethnicity and US educational policy
- HUDF 5046, Education and politics in Western thought
- ORLA 4030, Ethical issues in educational leadership
- ORLA 4040, Education policy decision making
- ORLA 4042, Role of the state in education, governance, policy and practice
- ORLA 4086, Law and educational institutions: Social policy—student personnel
- ORLA 5012, Community politics, community policies and administrators
- ORLA 5541, Federal politics, federal policies and administrators
- ORLA 5645, Topics in policy planning and implementation: Intergovernmental relationships
- ORLA 5646, Topics in policy planning and implementation: Concepts and techniques

Statistics (6 points):

HUDM 4122, Probability and statistical inference; and HUDM 5122, Applied regression analysis

Methodology (6 points):

Two of the following:

- HUDF 5020, Methods of social research: Survey methods
- HUDF 5021, Methods of social research: Evaluation methods

- HUDF 5029, Sociological research methods in educational settings

Additional Courses (36 points):

In consultation with an advisor, policy-related courses are selected from Teachers College, the Graduate School of Arts and Sciences, and the School of International and Public Affairs. At least 3 courses must be from outside the department.

Culminating Experience: Master's essay or examination.

Note: Refer to the *Degree Requirements* section of this catalog for information regarding transfer credits.

Doctor of Philosophy-75 points

Required Courses (12 points):

Select from the following:

- HUDF 4000, Education and public policy
- HUDF 4040, American politics and education
- HUDF 4042, Comparative politics and education
- HUDF 4043, Political thought and education
- HUDF 5042, Urban politics and education
- HUDF 5045, Race, ethnicity and US educational policy
- HUDF 5046, Education and politics in Western thought
- ORLA 4030, Ethical issues in educational leadership
- ORLA 4040, Education policy decision making
- ORLA 4042, Role of the state in education, governance, policy and practice
- ORLA 4086, Law and educational institutions: Social policy—student personnel
- ORLA 5012, Community politics, community policies and administrators
- ORLA 5541, Federal politics, federal policies and administrators
- ORLA 5645, Topics in policy planning and implementation: Intergovernmental relationships

- ORLA 5646, Topics in policy planning and implementation: Concepts and techniques

Statistics (6 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis

Methodology (6 points):

Two of the following:

- HUDF 5020, Methods of social research: Survey methods
- HUDF 5021, Methods of social research: Evaluation methods
- HUDF 5029, Sociological research methods in educational settings

Seminars and Colloquia

(6 points):

Two of the following:

- HUDF 5640, Colloquium on the politics of education
- HUDF 6540, Seminar in politics and education
- HUDF 7500, Dissertation seminar

Political Science (6 points):

Two courses in political science from the Graduate School of Arts and Science selected in consultation with an advisor.

Additional Courses (39 points):

In consultation with an advisor, policy-related courses are selected from Teachers College, the Graduate School of Arts and Sciences, and the School of International and Public Affairs. At least 3 courses must be from outside the department.

Additional Requirements: Foreign language and certification examinations. Completion of an approved dissertation.

Note: Refer to the *Degree Requirements* section of this catalog for information regarding transfer credits.

Doctor of Education-90 points

Required Courses (12 points):

Select from the following:

- HUDF 4000, Education and public policy
- HUDF 4040, American politics and education
- HUDF 4042, Comparative politics and education
- HUDF 4043, Political thought and education
- HUDF 5042, Urban politics and education
- HUDF 5045, Race, ethnicity and US educational policy
- HUDF 5046, Education and politics in Western thought
- ORLA 4030, Ethical issues in educational leadership
- ORLA 4040, Education policy decision making
- ORLA 4042, Role of the state in education, governance, policy and practice
- ORLA 4086, Law and educational institutions: Social policy—student personnel
- ORLA 5012, Community politics, community policies and administrators
- ORLA 5541, Federal politics, federal policies and administrators
- ORLA 5645, Topics in policy planning and implementation: Intergovernmental relationships
- ORLA 5646, Topics in policy planning and implementation: Concepts and techniques

Statistics (6 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis

Methodology (6 points):

Two of the following:

- HUDF 5020, Methods of social research: Survey methods
- HUDF 5021, Methods of social research: Evaluation methods
- HUDF 5029, Sociological research methods in educational settings

Seminars and Colloquia

(6 points):

Two of the following:

- HUDF 5640, Colloquium on the politics of education
- HUDF 6540, Seminar in politics and education
- HUDF 7500, Dissertation seminar

Additional Courses (60 points):

In consultation with an advisor, policy-related courses are selected from Teachers College, the Graduate School of Arts and Sciences, and the School of International and Public Affairs. At least 3 courses must be from outside the department.

Additional Requirements: Foreign language and certification examinations. Completion of an approved dissertation.

Note: Refer to the *Degree Requirements* section of this catalog for information regarding transfer credits.

Courses:

Introductory

HUDF 4000. Education and public policy (3)

Faculty. Current issues in American educational policy.

HUDF 4040. American politics and education (3)

Faculty. Introduction to the basic analytical categories of political science as they apply to the politics of education, including the influence of federal, state, and local governments in school policy-making, decentralization, school finance, and desegregation.

HUDF 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.

HUDF 4043. Political thought and education (3)

Faculty. Study of the educational imperatives inherent in the classics of Western political thought.

Intermediate

HUDF 5042. Urban politics and education (3)

Faculty. Politics in the nation's largest cities with a particular focus on educational politics and policy.

HUDF 5044. Modern political theory and education (3)

Dr. Snauwaert. Explores a number of educational policy issues from the perspective of contemporary political theory.

HUDF 5045. Race, ethnicity, and U.S. educational policy (3)

Faculty. Examination of the impact of race and ethnicity on the formation and implementation of policies such as desegregation, affirmative action, bilingual education, and choice.

HUDF 5046. Education and politics in Western thought (3)

Faculty. Study in historical perspective of the interactions between technological innovation and education.

Advanced

HUDF 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.

HUDF 5642. Colloquium in political economy and education (3)

Faculty. Political and economic perspectives on contemporary problems of public policy and education.

HUDF 5645-HUDF 5646. Policy seminar (3 each)

Faculty. An examination of policy formation, analysis, implementation, and evaluation in education.

HUDF 6540. Seminar in politics of education (3)

Faculty/Staff. Permission required. Selected topics in the politics of education.

Individualized Studies

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 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 6940. **Studies in politics and education** (1–15)

See: *Program in Sociology and Education* for additional courses of interest.

Sociology and Education (Code: TFS)

Program Coordinator: Professor Gary Natriello

Degrees offered:

Master of Arts (M.A.), Educational Policy (option available)
Master of Education (Ed.M.), Educational Policy (option available)
Doctor of Education (Ed.D.)
Doctor of Philosophy (Ph.D.)

Special Application

Requirements/Information:
The GRE general is required for all doctoral applicants, and

doctoral applicants are reviewed for Fall term only.

Program Description:

The sociological inquiry of education began at Teachers College in the first decade of this 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 ninety-year 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 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 Requirements:

Master of Arts-32 points

Sociology Core (minimum of 12 points):

Select from:

- HUDF 4021, Sociology of education
- HUDF 4022, Sociology of urban education
- HUDF 4023, Poverty and the underclass
- HUDF 4024, Social stratification and education
- HUDF 4027, Sociology of classrooms
- HUDM 4028, Sociology of the life course
- HUDF 4029, Sociology of schools
- HUDF 4031, Sociology of evaluation
- HUDF 4032, Gender and inequality: Role of the school
- HUDF 4033, School improvement in the inner city
- HUDF 4640, Introductory colloquium in sociology of education
- HUDF 5020, Methods of social research: Survey methods
- HUDF 5021, Methods of social research: Evaluation methods
- HUDF 5027, Adolescents and delinquency
- HUDF 5029, Sociological research methods in educational settings
- HUDF 6525, Seminar in sociology of education

Research Methods (6 points):

HUDM 4122, Probability and statistical inference; and one course in qualitative methods, selected in consultation with an advisor.

Electives: (14 points): Selected in collaboration with an advisor.

Note: (minimum of 4 points): At least 2 courses must be taken outside the department.

Culminating Experience: Master's examination.

Master of Education-60 points

Sociology Core (12 points):
Select from:

- HUDF 4021, Sociology of education
- HUDF 4022, Sociology of urban education
- HUDF 4023, Poverty and the underclass
- HUDF 4024, Social stratification and education
- HUDF 4027, Sociology of classrooms
- HUDM 4028, Sociology of the life course
- HUDF 4029, Sociology of schools
- HUDF 4031, Sociology of evaluation
- HUDF 4032, Gender and inequality: Role of the school
- HUDF 4033, School improvement in the inner city
- HUDF 4640, Introductory colloquium in sociology of education
- HUDF 5020, Methods of social research: Survey methods
- HUDF 5021, Methods of social research: Evaluation methods
- HUDF 5027, Adolescents and delinquency
- HUDF 5029, Sociological research methods in educational settings
- HUDF 6525, Seminar in sociology of education

Research Methods (9 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis; and one course in qualitative methods, selected in consultation with an advisor.

Concentration (9 points):
Courses in Sociology of Education or an additional area of

concentration, selected in consultation with an advisor.

Electives (30 points):

Select in consultation with an advisor from offerings at Teachers College or other schools of Columbia University.

Note (minimum of 8 points):

At least 2 courses must be taken outside the department.

Culminating Experience: Master's examination.

Doctor of Philosophy-75 points

Sociology Core (9 points):

- HUDF 5022, Sociological analysis of educational systems
- HUDF 6534, Sociological theory in educational research
- HUDF 6021, Sociological research methods: Reporting

Sociology Electives (21 points):

12 points taken at Teachers College and 9 points taken at the Graduate School of Arts and Sciences, selected in collaboration with an advisor.

Methodology (9 points):

Six points selected from:

- HUDF 5020, Methods of social research: Survey methods
- HUDF 5021, Methods of social research: Evaluation methods
- HUDF 5029, Sociological research methods in educational settings. Three points taken at the Graduate School of Arts and Sciences.

Seminars and Colloquia

(6 points):

Select from:

- HUDF 4640, Introductory colloquium in sociology of education
- HUDF 5620, Advanced colloquium in sociology of education
- HUDF 6525, Seminar in sociology of education

- HUDF 7500, Dissertation seminar

Statistics (9 points):

- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis
- HUDM 5123, Experimental design

Classical and Modern Sociological Theory (6 points):

- G 4050, Classical sociology theory
- G 4156, Contemporary sociological theory, taken at the Graduate School of Arts and Sciences.

Additional Requirements: Certification examination, foreign language requirement, and an approved dissertation.

Note: Refer to the *Degree Requirements* section of this catalog for information regarding transfer credits.

Doctor of Education-90 points

Sociology Core (9 points):

- HUDF 5022, Sociological analysis of educational systems
- HUDF 6534, Sociological theory in educational research
- HUDF 6021, Sociological research methods: Reporting

Sociology Electives (12 points):

Selected in collaboration with an advisor.

Methods Sequence (6 points):

Select from:

- HUDF 5020, Methods of social research: Survey methods
- HUDF 5021, Methods of social research: Evaluation methods
- HUDF 5029, Sociological research methods in educational settings

Seminars and Colloquia

(6 points):

Select from:

- HUDF 4640, Introductory colloquium in sociology of education
- HUDF 5620, Advanced colloquium in sociology of education
- HUDF 6525, Seminar in sociology of education
- HUDF 7500, Dissertation seminar

Statistics (6 points):

Select from:

- HUDM 4122, Probability and statistical inference
- HUDM 5122, Applied regression analysis
- HUDM 5123, Experimental design

Classical or Modern Sociological Theory (3 points):

Taken at the Graduate School of Arts and Sciences.

Electives (47 points):

Select in consultation with an advisor.

Additional Requirements: Certification examination and an approved dissertation.

Note: Refer to the *Degree Requirements* section of this catalog for information regarding transfer credits.

Courses:

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)

Faculty. 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)

Dr. Sadovrik. Analysis of urban school systems, schools, and students.

HUDF 4024. Social stratification and education (3)

Professor Cookson. 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)

Faculty. 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. Includes case studies of parenthood, divorce, widowhood, and the transition to adulthood.

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 and inequality: The role of the school (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)

Faculty. Permission required. Intensive readings and discussions of basic literature in sociology of education, with attention to common issues and research strategies.

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 (3-6)

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.

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)

Faculty. 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 5620. Advanced colloquium in sociology of education (1-3)

Faculty. 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 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 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 Natriello.

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 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 Herve Varenne
Location: 348 Macy Hall
Telephone Number: 678-3947
Fax: 212-678-8237
Email: mct27@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
(Mathematics, Science, and Technology)
Clifford A. Hill
Hope Jensen Leichter
Henry Levin
Mun C. Tsang
Herve Varenne

Associate Professors:

Jo Anne Kleifgen
Francisco Rivera-Batiz
Gita Steiner-Khamsi
Maria Emilia Torres-Guzman

Assistant Professor:

Frances Vavrus

Adjunct Professor:

Joseph Paul Martin

Adjunct Associate Professors:

Robert W. Bailey
Betty A. Reardon
Dale T. Snauwaert

Instructor:

Eric Larsen

Participating Faculty from the Graduate School of Arts & Sciences:

Myron L. Cohen
Ralph L. Holloway

Departmental mission:

As Teachers College embarks upon a new century, it is strengthening its commitment to the international arena. For the first time, it has committed the resources of an entire department to developing research and instructional programs in international and transcultural studies. As indicated by the name of the new department, the College is broadening its approach to this area. The introduction of the term *trans-cultural* conveys an additional perspective that reflects the challenges of the era in which we live.

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.

Our own country 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 departmental mission is to prepare professionals who can provide leadership in the new kinds of educative configurations that will emerge in the next century. To prepare students for these leadership roles, we offer a range of professional specializations within our department: applied educational finance; bilingual/bicultural education; civic education; language, literacy, and technology; family and community education; gender studies; and peace education.

We work with other departments at the College to provide our students additional specializations 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 specializations (e.g., African Studies, Eastern European Studies, Middle East Studies, Russian Studies, East Asian Studies, South Asian Studies).

Finally, we work with faculty members in academic disciplines such as anthropology, economics, history, political science, and sociology to prepare our students to do research

in comparative and international education.

Comparative and International Education

(Code: TFI)

Program Coordinator: Professor Gita Steiner-Khamsi

International Educational Development

(Code: TFZ)

Program Coordinator: Professor Gita Steiner-Khamsi

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 international education programs should indicate their tentative area of specialization on their application forms. 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 specialization for masters and doctoral degrees. Within the department, the program offers academic disciplinary specializations in anthropology and economics, and the following geographical areas of specialty: African Studies, the Caribbean, Eastern European Studies, Middle East Studies, Russian Studies, East Asian Studies and South Asian Studies and South American Studies.

In conjunction with, but outside the department, degree specializations 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 trans-cultural or geographical area of study.

Several academic and professional areas of concentration are offered, including: Bilingual/bicultural Education, Family and Community Education, Finance and Planning, Language, Literacy and Technology, and Peace Education.

In conjunction with, but outside the department, specializations are offered in:

- Adult Education
- Communication (computing and technology)
- Conflict Resolution
- Curriculum and Teaching
- Educational Administration
- Health Education
- Higher Education
- Mathematics Education
- Policy Studies
- Science Education
- TESOL

Family and Community Education Teachers College continues its long history of groundbreaking work through the new specialization in Family and Community Education. In this specialization 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 drastically-as in the case of new technological enterprises studies in Family and Community Education examine the changing linkages among educative institutions in the community.

Fundamental changes in education also stem from the extensive transnational migration and immigration taking place in many areas of the world today. Given increasing geographic mobility, together with new forms of communication, an understanding of the connections between local and global cultures, and the resources families and communities bring from one area to another is essential for educators and policy makers. Thus, another focus of study is family migration, immigration, and education.

The specialization 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, higher-education finance, privatization and educational choice, international aid and education, decision analysis and planning in education, as well as the international and transcultural contexts of educational financing and planning.

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 non-profit 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.

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 the nuclear age, 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 specialization in Peace Education and Conflict Resolution, which consists of three peace education and two conflict resolution courses.

At least one course in Conflict Resolution is required of all students specializing in peace education. The course may be chosen from among the following, depending on previous knowledge of the field. Those without previous background must choose either ORLJ 5340 or ORLJ 6040.

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 specialization 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

- Specialization 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

- Specialization 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 specialization within the framework of comparative and international educational development. Ph.D. students must also pass an oral certification exam.

Courses:

General

ITSF 4054. **Education and strategic planning** (3)
Faculty. Educational planning within the context of national eco-

nomics; 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)
Professor 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 Levin, Topic 1: Privatization and school choice
- Professor Martin, Topic 2: Human rights

- Professor Steiner-Khamsi, Topic 3: Civic literacy
- Professors Tsang and Levin, Topic 4: Methods of decision analysis in education
- Professor Tsang, Topic 5: Financing of education: international and comparative perspectives
- 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 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 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 4054. **Education and strategic planning** (Faculty)

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.

- Professor Levin, Topic 1: Privatization and school choice
- Professors Tsang and Levin, Topic 4: Methods of decision analysis in education
- Professor Tsang, Topic 5: Financing of education: International and comparative perspectives

- ORLC 4031. **Financial administration of higher education institutions** (Professor Baldwin)
- ORLC 4046. **School finance: Policy and practice** (Professor Richards)
- ORLC 5016. **Law and educational institutions** (Faculty)
- ORLC 5025. **Ecology of educational management** (Professor Richards)
- ORLC 4500. **Special topics in higher and adult education: Financing of higher education** (Professor Levin)

Language, Literacy, and Technology

ITSL 4011. **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.

ITSL 4019. **Orality, literacy, and technology** (2–3)
Professor Hill. 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.

ITSL 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.

ITSL 4801. **African-American language and communication** (non-credit or 1)
Professor Hill. An exploration of the varieties of African American language use, with particular attention to the communicative functions they serve.

ITSL 4811-ITSL 4813. **Computer based language teaching** (non-credit 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.

- ITSL 4811. **Computers, language and children**
- ITSL 4812. **Computers for high school and adult language learners**
- ITSL 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.

ITSL 5519. **Research in language and literacy I** (2–3)
Professor Hill. 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.

ITSL 5520. **Research in language and literacy II** (2–3)
Professor Hill. 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.

ITSL 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.

ITSL 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** (1–2) Professors Reardon and Snauwaert. 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 specialization in peace education.

ITSF 4611. **Education for global security** (1–3) Professor Reardon. Explores issues of peace and violence from various perspectives, among them feminism and environment, emphasizing alternative analytic frameworks and various values systems.

ITSF 4613. **Fundamental concepts in peace education** (1–2) Professor Reardon. Introduction to theory and practice and the international literature of the field as it has been developed over the past three decades.

ITSF 4614. **The United Nations as peace educator** (2–3) Faculty. This course reviews and assesses the work of the world organization and how it facilitates the learning necessary to an integrated global society. It is problem focused and the focus problem is different each semester. (This course takes place partly on site at the UN)

ITSF 4800. **International Institute on Peace Education** (1–2) Professor Reardon. (Summer optional) An intensive course of full days over one or two weeks, focusing on a specific peace education issue or theme; internationally staffed with international participants; offered jointly with cooperating universities in other countries.

ORLJ 5340. **Basic Practicum in Conflict Resolution and Mediation Skills**

ORLJ 6350. **Advanced Practicum in Conflict Resolution and Mediation, Part One**

ORLJ 6040. **Fundamentals of Cooperation, Conflict Resolution, and Mediation in Different Institutional Settings**

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 agencies, 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 programs 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 socio-cultural 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. Stu-

dents 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 certification examination and dissertation proposal. Fifteen points in

research methods and statistical courses are also required. The remaining 15 points of electives are used to increase competence in comparative, regional or international studies, or to enhance technical skills used in conjunction with but outside the major course of study. At least three of these courses (8-9 points) must be taken in fields foundational to anthropology (economics, history, linguistics, philosophy, psychology, sociology.) Of the 75 graduate points required for the degree, a minimum of 45 must be taken for an evaluative letter grade.

Foreign Language Requirement
Each candidate must satisfy the foreign language requirement by demonstrating proficiency in two scholarly languages, or one scholarly language and one field language, or one scholarly language and a two semester sequence of prescribed statistics courses.

Applied Anthropology

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 foundational to anthropology (economics, history, linguistics, philosophy, psychology, sociology.) Of the 75 graduate points required for the degree, a minimum of 45 must be taken for an evaluative letter grade.

Foreign Language Requirement
Each candidate must satisfy the foreign language requirement by demonstrating proficiency in two scholarly languages, or one scholarly language and one field language, or one scholarly language and a two semester sequence of prescribed statistics courses.

Courses:

Introductory Courses

ITSF 4003. **American culture and education** (3)
Professor Varenne. An orientation to American culture and education.

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.

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.

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.

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: Structural and interpretive analysis (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.

ITSF 5003. Communication and culture (3)

Professor Varenne. Introduction to major theories of human communication and culture as they relate and build on each other.

ITSF 5005. Interdisciplinary study of the family (3)

Professor Varenne. Critical examination of the interaction of internal and external forces and their effects upon individuals and families, drawing upon perspectives of various social science disciplines.

ITSF 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. Cross-cultural studies of learning processes. Emphasis on recent work in the field, problems of cross-cultural methodology, and the study of socialization.

ITSF 5014. Symbolic anthropology (3)

Professor Varenne. An introduction to the anthropological study of symbols and meaning with emphasis on the relation between cultural constructions of the world and action in the world.

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 5019. Applied Social Science: Theory, Policy, and Practice (3)

Professor Bond. This course will introduce students to the anthropological analysis of organizations through the theoretical literature; the analysis of case studies within the contexts of historical processes such as globalization and modernity and their affects on empirical situations and policies.

Colloquia

ITSF 5610. First-year colloquium in applied anthropology (3)

Professors Bond and Varenne. Permission required. This is a year-long critical review of important works in anthropology and education and applied anthropology. During the spring semester students present proposals for their summer fieldwork before the members of both programs. Required of, and open only to, first-year doctoral students. Meets concurrently with MSTF 5611 during the spring semester.

ITSF 5611. Second-year colloquium in anthropological method (3)

Professors Harrington and Comitas. 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: MSTF 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: Drugs and society (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 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.

Bilingual/Bicultural Education

(Code: TLB)

Program Coordinator: Professor Maria Torres-Guzman

Degree Offered:

Master of Arts (M.A.)

Special Application

Requirements/Information:

Fluency in English and either Spanish, Chinese, Korean, Haitian Creole, or Russian is required for all Bilingual/Bicultural programs. Applicants must establish language proficiency before being admitted. It is recommended that students take a language examination in their language of specialization and have their scores forwarded to the Program in Bilingual/Bicultural

Education Office. All applicants must also submit a separate program application directly to the Program in Bilingual/Bicultural Education Office, furnish a professional resume and schedule an interview; please contact the Program in Bilingual/Bicultural Education Office for the program application.

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:

The M.A. student must complete a course of study in one of two routes: in-service or pre-service. 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; the in-service to all language groups listed above. The M.A. program leads to elementary and bilingual education 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.

Program Concentration
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 either for a master of arts or doctoral degree with a bilingual emphasis in a cooperating Teachers College program. 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. 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.

Participating Degree Programs
with an Emphasis in Bilingual
Education:

- TABB Educational Administration (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 Hearing Impairment (M.A., Ed.D.)
- TEGB Guidance and Rehabilitation (M.A.)
- TFAB Anthropology and Education (M.A., Ed.M., Ed.D.)
- TFGB Politics and Education (M.A., Ed.M., Ed.D.)
- TFHB History and Education (M.A., Ed.M., Ed.D.)
- 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 Educational Psychology Human Cognition and Learning (M.A., Ed.D.)
- TKRB Educational Psychology: Remedial Reading (M.A.)
- 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-Pre-service (M.A.)
- TYZB Curriculum and Teaching (M.A., Ed.M., Ed.D.)

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)
Faculty. 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)

Faculty. 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 Creole, 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 1–3)

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 (1–6)

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 settings 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: Professor 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 Program in Economics and Education with a specialization 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 policy-making.

The Program begins in September and concludes in August of the following year. It consists of two semesters and a summer session.

The curriculum of the program aims to:

- build students' technical competence in the basic tools of educational management and policy making
- provide the academic and professional environment for students to apply these skills
- 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 stu-

dents 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 specialization in Educational Policy. The student will design that program under the guidance of the academic advisor.

Doctor of Philosophy

This 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 education, 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 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 4059. Education, economic growth, and competitiveness (3)

Professor Bailey. The relation between education and economic growth, productivity, and competitiveness of the firm and the macro-economy. Focuses on the educational implications of the changing nature of work, greater international competition, and the varying rates of productivity growth.

ITSF 4094. Educational planning in international educational development (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.

- Professor Levin, Topic 1: Privatization and school choice
- Professors Tsang and Levin, Topic 4: Methods of decision analysis in education
- Professor Tsang, Topic 5: Financing of education: International and comparative perspectives

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 5650. Readings in the economics of education (3)

Professor Bailey. 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.

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)**
- ORLC 4030. **The economics of post-secondary education (3)**
- ORLC 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 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.

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 comparative education (1–15)

Chair: Professor O. Roger Anderson
Room 321 Thompson Hall
Telephone: (212) 678-3405
Please direct admissions questions to the Office of Admissions, (212) 678-3710.

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
Ernest Z. Rothkopf
Herve Varenne
Bruce R. Vogeli

Visiting Professors:

Henry Pollak
J. Phillip Smith

Associate Professors:

Angela Calabrese-Barton (On leave 2000–2001)
Robert P. Taylor
Jo Anne Kleifgen

Research Associate Professor:

Frank Moretti

Adjunct Professor:

Joel E. Schneider

Assistant Professor:

Elaine Howes

Adjunct Assistant Professors:

Jamsheed Akrami
Howard Budin
Michael Ryan
Keith Sheppard
Robert Steiner
Thane Terrill
Kathy Powell

Instructors:

Eric Cohen
Barbara Abbate-Sturman
Roberto Agodini
Yoonil Auh
Sheila Kieran-Greenbush
Craig Bolotin
Robert Matsuoka
David Miele
Charles Schultheiss
David Van Esselstyn

For information about faculty and their scholarly and research interests, please refer to the “Faculty” section of the Catalog.

Departmental mission:

The primary goal of this Department is to understand the impact of interrelated disciplines of science, mathematics, technology and communication media on education.

Science—and the world we have come to know through science—is the foundation upon which technology is formed and transformed. Society is not only the environment in which science, mathematics, technology and communications media develop, it also is the force that shapes the nature of such work. Within that framework, these scientific disciplines can free, but also constrain, collective and individual potential. Consequently, the relationship between society and the sciences has important implications for each of the Department’s fields of study.

The program in science and mathematics education addresses such topics as:

- the education of mathematics and science teachers and teacher educators
- the acquisition of scientific and mathematical literacy to foster the future development of science and technology

- the understanding of environmental sciences and improved global utilization of the environment and the linkages between science and society
- the use of computers, computer modeling and instrumentation in mathematics and science instruction.

The primary goal of the program in Computing, Communication, and Technology is to utilize multimedia effectively in education. Faculty in these programs are concerned with:

- the individual and cooperative use of technologies in education, including distance learning
- the implications of global, multicultural perspectives on technology development
- the training of professionals in the fields of computing, communication, and instructional technology.

These programs link the College to ongoing university initiatives in communication.

Departmental Core Courses MST 5042. Science, technology, and society (3)

Faculty. The nature and interrelationships of science, technology, and society as represented in policy and curriculum for education.

Other Department-Wide Courses

MST 4005. Teaching mathematics and science in diverse cultures (1–3)

Faculty. Principles, techniques, and issues in the teaching of mathematics and science in other cultural and national settings.

MST 5003. Communication and culture (3)

Professor Varenne. Introduction to major theories of human communication and culture as they relate and build on each other.

MST 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. Special fee: \$25.

Communication, Computing, and Technology in Education

Program Coordinator:
Professor Robert McClintock

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.

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, and should meet the January 2 application deadline.

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 different poles-towards 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.

- With 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, development, theory, and application. All three programs put a high priority on group work, field work and internships, and planning, implementing, and completing innovative projects. Schools, computer companies, businesses, and other agencies are normally partners in projects, providing environments, materials, personnel, or opportunities for carrying them out. The Institute for Learning Technologies (<http://www.ilt.columbia.edu>) and the Center for Technology and School Change (<http://www.tc.columbia.edu/~academic/ctsc/>) 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. Faculty members and students pursue three broad areas of inquiry, enabling them to:

- Reflect on the historical effects of media and on the cultural uses of developments such as face-to-face speech, writing, printing, photography, film, radio, television, computers, and networked multimedia
- Use anthropological and linguistic methods to study how the diverse forms of communication, 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-to-face, 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.

Within the general area of computing and education, faculty members and students study the interactions between computing and education, interactions that grow ever more powerful and diverse. One important effort aims to improve how computing, including programming, is taught in schools, and in this area we make special efforts to

address the need for appropriate software throughout education and the search for appropriate pedagogies for teaching computing at diverse levels, from early childhood through maturity. A second major direction seeks to develop and implement appropriate patterns of use for computers at various levels of formal education, paying attention to matters of equity, pedagogical value, and the productive allocation of scarce educational resources. Students in this program should master the skills needed to design, implement, and manage the substantive uses of digital telecommunications systems for educational purposes.

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?

These questions remain matters of basic concern within this program and in the related programs in the area of Communication, Computing and Technology. The World Wide Web and related technologies have lowered the costs of distance learning programs greatly while increasing their flexibility. Through Instructional Technology and Media, faculty members and students join to develop the skills needed to make full use of the new opportunities in distance and distributed learning.

Participants in this and other programs share a basic conviction that good design in education 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:

Requirements do not determine all the courses a student should take; they should help structure the type and character of student choices. The college-wide degree requirements are stated on page 282 in 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, or from our website, thales.ilt.columbia.ilt/ccte/programs/. Following the requirements is a necessary, but not sufficient, way to a degree. Degrees represent advanced levels of mastery in rigorous scholarship and disciplined practice. In meeting requirements, students should find ways to meet the intrinsic demands of the field, which cannot be reduced to simple steps.

Master of Arts

The Master of Arts (M.A.) degree is granted upon satisfactory completion of 32 points and an integrative special project. In these 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).

Unless a faculty advisor authorizes an exemption, all M.A. candidates should complete the following Program requirements. They should take MSTU4000, Core Seminar in Communication, Computing, and Technology, for 2 points 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, Computers and writing
- MST 5003, Communication and culture
- MSTU 5020, Computer-mediated 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 Technology in Education
- MSTU 4008, Information technology and education
- MSTU 4083, Instructional design of educational technology
- MSTU 4133, Cognition and computers
- MSTU 5020, Computer-mediated 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 fur-

ther information on Fieldwork and Internships below.

Master of Education

This degree is designed for students who have completed a master's degree. Up to 30 points of graduate credit earned elsewhere may be counted toward the minimum 60-point requirement. Candidates for the Master of Education (Ed.M.) who have not met the Core Requirements for the M.A. degree in their program, must do so in order to complete the Ed.M. In addition to completing the minimum course requirements and developing a skill specialization, candidates for the Ed.M. degree will be expected to culminate their work through a research or development project submitted to the faculty. This project should be one that represents 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, CTE 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 innovative schools in New York City, working in implementation activities through the Eiffel Project, a U.S. Challenge Grant for Technology in Education.

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/academic/ibco/.

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, conver-

sations 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 (3)
Professor McClintock. How have practices of abstract reasoning, the pursuit of formalism, and conceptualizing the structure of complex phenomena affected modern design and communication? Readings and class discussions explore this question, using examples drawn from architecture, fine art, graphics, typography, photography, advertising, industrial design, formal organization, process control, transportation, information theory and management, and major media of communication. Special fee: \$25.

MSTU 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 cross-cultural communication (3)
Professor Akrami. Analyzes how films explore culture. Discussion of the film as well as on the cultural messages portrayed. Special fee: \$50.

MSTU 4030. Computer applications in education (3)
Professor Budin & 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. Auh & Mr. Lawrence. 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)
Mr. Matsuoka, Mr. Leipolt, Ms. Dimaraki, & Ms. Magar. 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)

Professor 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. Computers and writing (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)

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.

MSTU 4080. Television and video applications in education (3)

Faculty. The role of media literacy is explored as a means to understand our popular culture and foster critical autonomy in young people. Emphasis is placed on critiquing educational television programs and video and using them effectively in the classroom. Special fee: \$35.

MSTU 4083. Instructional design of educational technology (3)

Faculty. 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: \$25.
- MSTU 4134. **Cognition and computers lab (1–3)** Permission required. Corequisite: MSTU 4133. Special fee: \$25.

MSTU 4901-MSTU 4902. 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 5020. Computer mediated communication (3)

Professor McClintock. Analyzes characteristics of such computer-mediated communication systems as networked multimedia, electronic mail, bulletin boards, and computer conferencing, and situates these systems in the context of the emerging national information infrastructure. Students will participate in on-line communication systems. Special fee: \$50.

MSTU 5030. Intelligent computer-assisted instruction (3)

Faculty. Prerequisite: MSTU 4133. Participants study ideas about the representation of knowledge, models of the learner, and teaching strategies that have been developed in artificial intelligence and cognitive psychology, 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)

Dr. Keegan. 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 (3–4)

Mr. Riccobon. Permission required for MSTU 5192. Practical studio and field production experience of educational video programs, with special concern for realizing educational purposes through directing, scripting, staging, camera operation, lighting, and sound design. Special fee: \$75.

MSTU 5194. Models of 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 5202. 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 (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:

- **Section 1. Topical Seminar: Authoring Systems (3)** Faculty. This seminar explores issues surrounding Authoring Tools, including the pragmatic question of how the design process ought to be supported, as well as the more challenging theoretical question of what, if any, pedagogies should such tools embody. Students will examine a representative range of authoring systems via course readings and demos, and will engage in the design and development of an original authoring tool or extension of an existing tool. Special fee: \$25.
- **Section 5. Topical Seminar: Schools as communications systems (3)** Professor Moretti. An analysis of the "school" as an historical entity conditioned by available communications technologies, political ideologies, and cultural predispositions, followed by an in-depth exploration of the possibilities for the school of the future based on new technologies. Special fee: \$25.
- **Section 6. 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 infra-

structure 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.

• Section 7. **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.

• Section 8. **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.

• Section 9. **Topical Seminar: Human capital in a digital world** (3)

Professor Rothkopf. This seminar will examine the transmission of information from cohort to cohort-teaching, stored information, communication nets, tool and device affordances, EPSSs, and media and other cultural influences on the disposition to use information. Special fee: \$25.

MST 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 applications in software development (3–6)

Professor Taylor. Permission required. Team approach to developing computer-based educational software using hypermedia, authoring languages, and programming languages. Some background in instructional design recommended. Special fee: \$75.

MSTU 6201-MSTU 6204.

Advanced fieldwork (1–6)
Permission required. Extended opportunities for students who have completed MSTU 5200.

MSTU 6401-MSTU 6404.

Internship (1–6)
Permission required. Prerequisite: basic courses in the student's specialization, evidence of competence in the internship area, and prior arrangement with cooperating institution. Internship in schools, colleges, Teachers College facilities such as the Microcomputer Resource Center, community agencies, business organizations, 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 stu-

dents 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)

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 a strong minor in mathematics. A major in mathematics is desirable.

Mathematics education students seeking Doctor of Education or Doctor of Education in College Teaching of an academic subject degrees are expected to have completed at least the equivalent of 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 tri-state metropolitan region.

Through funded projects, dissertation research, training and service to national teacher organizations, the faculty and stu-

dents 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 pre-service 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 education 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 com-

plete 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

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 pre-service 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.

Courses open to non-majors
A number of departmental offerings are suitable for non-majors because of their non-technical nature. See course

descriptions that follow in the sections about specific programs. Consult advisors about other courses not listed.

Mathematics

- MSTC 4005, Teaching mathematics and science in diverse cultures
- MSTC 4019, Mathematics teaching and learning: Learning theories, methods, and curriculum
- MSTC 4025, Teaching computer mathematics
- MSTC 4026, Teaching applied mathematics
- MSTC 4039, Mathematical foundations of programming
- MSTC 4820, Basic Java Programming
- MSTC 4827, C++ programming workshop
- MSTC 5010, Mathematics in the elementary school
- MSTC 5020, Mathematics in multicultural education
- MSTC 5028, Pascal/data structures
- MSTC 5037, History of mathematics

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 can either 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 MSTC 4019; MSTC 4020; MSTC 5012 or MSTC 5520. All students are encouraged to take MSTC 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 MSTC4019 (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 MSTC 5800-5801 Colloquia in Mathematics Education for one to three points. Programs for specialists in the teaching of elementary school mathematics should include MSTF 5010. Secondary school specialists should enroll in MSTC 5023, MSTC 5032, and MSTC 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 three specializations. Teachers desiring a specialization in computing should enroll in MSTC 4036, MSTC 5028 and MSTC 5029. MSTC 4820 and MSTC 4827 are also recommended. (See course list below for descriptions.) Pre-service 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 preparation in statistics. HUDM 4122/HUDM 5123 Probability and statistical inference/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 compe-

tencies 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 MST4019/4020 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: MSTC 5031, MSTC 5032, MSTC 4036, MSTC 6030, MSTC 6033, MSTC 6034, or MSTC 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 statistics courses in their programs. These points can be included either in the mathematics/mathematics education requirement or can be taken as 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 MSTC 6500 and MSTC 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 pro-

ject. 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 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 MSTC 5012 or MSTC 5520 and 12 points of research preparation including MSTC 6500 and MSTC 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 MSTC4600 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 teaching-learning process, including studies of verbal learning and laboratory practice, or historical studies.

Candidates are encouraged to develop an association with a faculty member early in their studies to identify a problem area of mutual interest, to plan a course of studies that leads to the competencies needed to complete dissertation research and prepare for a professional role. Further details are available in the 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 (MSTC 6500, MSTC 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:

Mathematics Education

Program Advisor: Professor Bruce R. Vogeli.
For certain courses in the program in Mathematics Education, special fees, including laboratory fees, may be assessed.

Theory and Methods

MSTC 4019. Mathematics teaching and learning: Learning theories, methods, and curriculum (3)
Professor Vogeli. Cognitive development and learning strategies for teaching and the use of instructional materials. Curriculum development techniques. Required for pre-service students.

MSTC 4020. Mathematics teaching and learning: Historical perspectives, special students, and research (3)
Faculty. Historical/comparative study of mathematical education programs in the United States and abroad. Mathematics education with special student populations. Current research in mathematics education.

MSTC 4025. Teaching computer mathematics (3)
Faculty. A review of teaching methods and curricular innovations in computing and computer mathematics.

MSTC 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.

MSTC 5010. Mathematics in the elementary school (3)
Professor Vogeli. Problems, issues, and methods in the teaching and supervision of elementary school mathematics.

MSTC 5011. Mathematics in the secondary school (3)
Professor Vogeli. Problems, issues, and methods in the teaching and supervision of secondary school mathematics. Includes field experiences. Required for pre-service students.

MSTC 5012. Mathematics in two- and four-year colleges (3)
Faculty. Problems, issues, and methods in the college teaching of mathematics.

MSTC 5020. Mathematics and multicultural education (1–3)
Faculty. Survey of mathematical topics and methods appropriate for multicultural and bilingual programs.

MSTC 5022. Mathematics curriculum development (2–3)
Professor Vogeli. Principles, strategies, and techniques for curriculum development and textbook preparation in mathematics.

MSTC 5023. Problem solving (3)
Faculty. Theories and methods of mathematical problem solving with applications to classroom instruction.

MSTC 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 Teacher Education.

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.

MSTC 4031. Number theory (3)
Faculty. Primes, composites, divisibility and factorization, congruence, historical topics.

MSTC 4032. Mathematical models in the behavioral sciences (3)
Dr. Pollack. Design and development of mathematical models of human behavior, including social, political, management, and defense models.

MSTC 4036. Discrete mathematics (3)
Dr. Pollack. Discrete mathematics, combinatorics, graph theory.

MSTC 4037. Computer graphics (3)
Faculty. Transformations, scaling, clipping, windowing, and hidden line algorithms. Software development for applications to mathematics and science education.

MSTC 4038. Finite mathematics (3)
Faculty. Statements, propositions, and sets. Vectors and matrices. Probability. Applications: finite Markov chains, game theory.

MSTC 4039. Mathematical foundations of programming (3)
Faculty. Logic, Boolean algebra, switching circuits, Turing machines and computability.

MSTC 4820. Basic Java Programming (3)
Dr. Ryan. An intensive course in Java Programming including classroom applications.

MSTC 4827. C++ programming workshop (3)
Dr. Ryan. Types, operators, and expressions in C++. Functions, program structure. Pointers, arrays, classes and objects.

MSTC 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.

MSTC 5028. Pascal/data structures (3)
Professor Vogeli. Data types and structures, stacks, queues, linked lists, trees, graphs, hashing.

MSTC 5029. Fundamental algorithms (3)
Professor Vogeli. Searching and sorting algorithms. Graph, tree, and network algorithms.

MSTC 5030. Topics in probability theory (3)
Faculty. Simple, compound, and conditional probabilities and applications. Doctoral students should register for MSTC 6030.

MSTC 5031. Topics in the foundations of mathematics (3)
Faculty. Propositional and predicate calculi, set theory, axiomatics, order types, and the linear continuum.

MSTC 5032. Topics in geometry/topology (3)
Dr. Smith. Foundation of geometry/topology. Emphasis upon the relationship between topology and geometry and other mathematical areas.

MSTC 5033. Topics in algebra (3)
Faculty. Groups, rings, fields. Doctoral students should register for MSTC 6033.

MSTC 5034. **Topics in analysis** (3)
Faculty. Real or complex functions and their properties. Doctoral students should register for MSTC 6034.

MSTC 5035. **Mathematical models in the natural sciences** (3)
Dr. Pollack. Simulation, information theory and coding, stochastic models, probabilistic systems, simple harmonic motion.

MSTC 5037. **History of mathematics** (3)
Faculty. Historical development of major ideas in mathematics. Contributions of noteworthy mathematicians. Analysis of mathematical classics.

MSTC 5038. **Topics in mathematical logic** (3)
Faculty. Goedel's completion theorem, Church-Turing thesis, Goedel's incompleteness theorem.

MSTC 5126. **Mathematical foundations of statistics** (3)
Faculty. Prerequisite: MSTC 5030 or MSTC 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 MSTC 6126.

MSTC 6030. **Advanced topics in probability theory** (3)
Faculty. Open only to doctoral students. Emphasis on proof and advanced applications.

MSTC 6033. **Advanced topics in algebra** (3)
Faculty. Open only to doctoral students. Advanced study of groups, rings, and fields.

MSTC 6034. **Advanced topics in analysis** (3)
Faculty. Open only to doctoral students. Advanced study of real or complex functions.

MSTC 6126. **Advanced topics in the mathematical foundations of statistics** (3)
Faculty. Open only to doctoral students. Prerequisite: MSTC 5030 or MSTC 6030. Advanced topics including hypothesis testing, distribution theory and analysis of variance and regression.

Program for Pre-service Teacher Education

Program Advisors: Staff

MSTC 4000. **Science in secondary school** (2–3)
Faculty. Foundations of science education. Planning, assessment, and management of instruction. Required of pre-service students.

MST 4005. **Teaching mathematics and science in diverse cultures** (1–3)
Faculty. Principles, techniques, and issues in the teaching of mathematics and science in other cultural and national settings.

MSTC 4023. **Mathematics for exceptional students** (3)
Faculty. Content, methods, and instructional models for teaching exceptional students.

MSTC 4363. **Science teaching practica for secondary education** (1)
Faculty. Corequisite: MSTC 4000. Directed field experiences and seminars explore school environments and teaching strategies.

MSTC 4760. **Student teaching in mathematics and science** (4)
Faculty. Permission required. Prerequisites: MSTC 4000 or MSTC 5011. Open only to students enrolled in the pre-service program. Students do supervised teaching in metropolitan area schools. Mathematics students register for section 1; science students, section 2.

MSTC 5010. **Mathematics in the elementary school** (3)
See Program in Mathematics Education for course description.

MSTC 5011. **Mathematics in the secondary school** (3)
See Program in Mathematics Education for course description.

MSTC 5061. **Evaluation in mathematics education** (3)
Faculty. Theory and methods of evaluating pupils and programs in the cognitive and affective domains.

MSTC 5264. **Guided supervision of student teaching in mathematics and science** (2)
Faculty. Permission required. Open only to doctoral students. Guided field experience in supervising student teachers.

MSTC 5361. **Guided supervision of mathematics and science teaching practica** (2)
Faculty. Permission required. Open to advanced Master's students and Ed.D. students.

Independent, Advanced and Dissertation Study

MSTC 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.

MSTC 5800-MSTC 5801. **Colloquia in mathematics education** (1–3)
Dr. Pollack. Lecture series featuring presentations by distinguished guest speakers.

MSTC 6400. **Internship in mathematics and science 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.

MSTC 6500-MSTC 6501. **Research seminar in mathematics and science education** (0–3)
Professor Vogeli. 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. Science education students register for section 2 of each course. After initial registration for credit, doctoral students who wish to register in subsequent semesters may do so for 0 credits.

MSTC 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.

MSTC 7500. **Dissertation seminar in mathematics and science education** (0–3)
Development of final doctoral dissertation proposals and presentation of proposals for departmental review.

MSTC 8900. **Dissertation advisement in mathematics and 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 9900. **Research and independent study in mathematics and science education** (1 or more)
Permission required. Open to postdoctoral students accepted for study at Teachers College.

Science Education

Program Coordinator: Professor O. Roger Anderson

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.)

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.
TCP College Teaching of Physical Science: Ed.D.C.T.A.S.
TCQ College Teaching of Earth Science: Ed.D.C.T.A.S.
TCR College Teaching of Biological Science: Ed.D.C.T.A.S.

TCT Education of Teachers of Science: Ed.M., Ed.D.

TCX Supervision in Science Education: M.A., M.S., Ed.M., Ed.D.

Special Application

Requirements/Information:

Applications are reviewed on an ongoing basis. Preference in scholarship awards will be for those applicants who meet the priority deadline.

Science education students seeking Master of Arts, Master of Science and Doctor of Education degrees should have at least the equivalent of a minor concentration in science.

Science education students seeking Doctor of Education, or Doctor of Education in College Teaching of an Academic Subject degrees should have the equivalent of an undergraduate major in one science and some course work in a second science and mathematics. The master's degree is recommended.

Science education students seeking a Doctor of Philosophy degree should have both undergraduate and master's degrees in their specialization.

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 in the tri-state metropolitan region.

Through funded projects, dissertation research, training and service to national teacher orga-

nizations, 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 pre-service and in-service teachers. Advanced master's and doctoral programs complete preparation for a variety of positions including teaching, supervisory, and research roles spanning the elementary through college levels of instruction. Some courses offered through these programs are intended especially for students from other areas of study at Teachers College who need to acquire knowledge and skills in science but who do not wish to earn a degree in these areas.

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-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 science, science education, and professional education 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 28 for the M.S.) and involve extensive preparation in science education. For the M.S. degree there is greater emphasis on preparation in science 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 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

Elementary School Science

The Elementary School Science 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 science 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 Science Teaching

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 science 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 science 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 Science

The Teacher Education in Science 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 science content background through content courses in the Department and the offerings of Columbia University. There are opportunities, also, for professional experiences in the pre-service 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 science 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.

Courses open to non-majors

A number of departmental offerings are suitable for non-majors because of their non-technical nature. See course descriptions that follow in the

sections about specific programs. Consult advisors about other courses not listed.

Science

- MSTC 4040, Science in childhood education
- MSTC 4043, Science in the environment
- MSTC 4044, Biology methods and curriculum laboratory
- MSTC 4048, Structure of physical science knowledge and curriculum design
- MSTC 4056, Earth science I: physical geography
- MSTC 4057, Earth science II: physical geology
- MSTC 4140, Laboratory methods and experiences for elementary school teachers
- MSTC 4558, Seminar in environmental sciences for secondary and college teaching
- MSTC 5040, Science curriculum improvement in the elementary school
- MST 5042, Science, technology, and society
- MSTC 5052-MSTC 5053, Biochemistry and cell biology
- MSTC 5152, Biochemistry and cell biology laboratory

Science Education

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 32-point 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 to meet State certification requirements. A minimum of 12–15 points in the breadth of science content, with sufficient depth in one area of specialization to communicate content effectively is required. Also, 6–12 points of general professional education are required. Students must complete 3–6 points of science education/professional science competencies courses, leaving 5–15 points in electives to be 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, the general methods course is required and precedes the semester in which student teaching is completed. The methods course is offered in the Fall and student teaching in the Spring. Pre-service program requirements are as follows: MSTC 4000; 2 points of electives in science education methods; 7 points of field experience including, MSTC 4363, MSTC 4760; 8-9 points of professional education

courses; 12 points of science disciplinary courses; and up to 5 points of electives.

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, and (4) for those students wishing certification in New York City, 3 credits in special education.

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 professional degree with intensive preparation in science subject matter. This degree is especially appropriate for prospective community college instructors who do not intend to pursue a doctorate immedi-

ately. 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

A minimum of 24 points in breadth of science content, but with sufficient depth in a specialization to communicate content effectively are required. Students are required to complete at least 9 points in professional education courses as well as 9 points in science education professional competencies. 3–6 points in statistics and/or research design are also required. This leaves a remaining 12–15 points of optional studies to be determined in consultation with the advisor.

Master of Science

A minimum of 30 points in breadth of science content, but with sufficient depth in a specialization to communicate content effectively are required. Students are required to complete at least 9 points in professional education courses as well as 6 points in science education professional competencies. 3–6 points in statistics and/or research design are also required. This leaves 9–14 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 should 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.

Doctor of Education and Doctor of Education in the College Teaching of an Academic Subject

The Science Education Program offers curricula leading to the degree of Doctor of Education (Ed.D.). There are two Ed.D. programs: (1) the Ed.D. for a variety of careers including college teaching of science education or for professional positions in elementary and secondary schools, and (2) the Ed.D. in College Teaching of an Academic Subject (Ed.D.C.T.A.S.). These programs are intended to prepare students for leadership in science education. The programs are 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.

A minimum of 30 points in breadth of science content, but with sufficient depth in a specialization to communicate content effectively are required. Students are required to complete at least 12 points in professional education courses as well as 21 points in science education professional competencies. Six points in statistics and/or research design are also required. This leaves a remaining 21 points of optional studies to be determined in consultation with the advisor.

The student, in consultation with an advisor, plans a program of study consistent with the student's prior education and oriented toward professional goals. This program plan is approved by the advisor and then submitted to the Office of Doctoral Studies. In planning a program of study, the student would be wise to pay particular attention to the time when the certification exam is taken. Students are required to complete a minimum of 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 60 points of graduate study. A special certification examination is designed for each candidate. Usually, it consists of a three-hour essay examination in the candidate's field of specialization in science education and a two-hour oral examination with at least two professors of the Department participating. The certification oral examination consists of a short formal presentation on a topic in science selected by the candidate followed by a period of general questions on science content and methodology of scientific inquiry.

Dissertation Guidelines

Candidates in the Ed.D.C.T.A.S., are recommended to plan an M.S. paper in experimental or theoretical science in their field of science specialization. The M.S. is taken in regular course toward the Ed.D.C.T.A.S., and contributes to the total points required for the Ed.D. degree.

The Ed.D. dissertation is a scholarly endeavor contributing new knowledge to the field and should be planned early in the doctoral program when suf-

efficient 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) experimental 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 Scientific Foundations.

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. Each program will contain no less than 13 points in the broad and basic areas of professional scholarship. No more than 9 points of "R" will be credited. In most cases these courses will be taken in the Graduate Faculties.

A minimum of 50 points in the students specialization are required, including 6–9 points in the foundations of science education, giving students a foundation in the philosophies and approaches to modern science education; 0–8 points in science education research courses, and 40 points in their science subject matter. Students are required to complete at least 13 points in broad and basic areas of professional scholarship, including, the nature of education and the nature of persons and the learning process. Students are required to complete 12 points of seminars and research methods courses as well, including MSTC7500 and MSTC8900 (See course list below for description.)

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 exhibit thorough and comprehensive mastery of a research discipline. A final chapter that addresses the conclusions of the research and its implications for education is required.

Courses:

Science Education

Program Advisors: Professors O. Roger Anderson, Angela Calabrese-Barton, Elaine V. Howes. 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.

Theory and Methods

MSTC 4000. Science in secondary school (2–3)
See Program for Preservice Teacher Education for course description.

MSTC 4040. Science in childhood education (2–3)
Faculty. Corequisite: MSTC 4140. Development of children's experiences in various areas of science. Science activities, experiments, and materials demonstrated.

MSTC 4048. Structure of physical science knowledge and curriculum design (2–3)
Faculty. Analyses of the organization of and relationships between concepts, laws, and theories in the physical sciences, using a variety of analytical techniques suitable for curriculum design.

MSTC 5040. Science curriculum improvement in the elementary school (3)
Faculty. Permission required. Designed for experienced elementary educators. Prerequisites: MSTC 4040 and MSTC 4140, or one year full-time elementary teaching experience. Exploration of K–6 science programs and materials with application to classroom programs as well as to school and district level curriculum development.

MST 5042. Science, technology, and society (3)
Faculty. The nature and interrelationships of science, technology, and society as represented in policy and curriculum for education.

MSTC 5540. Seminar in college teaching of science (3)
Faculty. Critical study of programs, objectives, content, methods, and research studies in science teaching at post-secondary institutions.

Laboratory and Curriculum Methods

These courses provide extensive experience with laboratory and curriculum materials used in science teaching. The elementary school laboratory focuses on experiences with science materials in childhood education. The secondary science laboratory courses also require critical study and evaluation of current curricular materi-

als, including new apparatus and techniques for laboratory study.

MSTC 4043. Science in the environment (2–3)
Faculty. Introduction to studies in environmental science, oceanography, and geology using field sites and museums with applications to secondary school science.

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 4045. Earth and environmental science curriculum and methods laboratory (3)
Faculty. Prerequisite: MSTC 4056–MSTC 4057 or equivalent. Lecture/discussion of new concepts and practice with related laboratory curriculum material and microcomputer simulations.

MSTC 4046. Chemistry curriculum and methods laboratory (3)
Faculty. Permission required. Individualized work with secondary chemistry curricula, stressing laboratory activity.

MSTC 4047. Physical science curriculum and methods laboratory (3)
Faculty. Permission required. Discussion of secondary school curricula, stressing laboratory activity.

MSTC 4140. Laboratory methods and experiences for elementary school teachers (1)
Faculty. Corequisite: MSTC 4040. Laboratory experiences with elementary school science materials.

MSTC 5046. Advanced chemistry methods and curriculum laboratory (3)
Faculty. Permission required. Prerequisite: MSTC 4046 or equivalent. Individualized work with advanced topics from secondary chemistry curricula, stressing laboratory activity.

See also: listings under Program for Preservice and Teacher Education.

Content Courses

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 (2–3)**

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: physical geography (3)** Study of the earth in space, elements of cartography, atmospheric-meteorology, climatology, and soils.
• **MSTC 4057. Earth science II: physical geology (3)** Discussion of earth materials, structure, history, and geomorphic processes.

MSTC 4059. Concepts in chemistry (2–3)

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 (2–3)

Faculty. Prerequisite: MSTC 4059. 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 4151. Survey of modern biological principles (3)

Faculty. Interdisciplinary study of scientific theories about origin and evolution of life on earth. Includes demonstration and laboratory experiments.

MSTC 4558. Seminar in environmental sciences for secondary and college teaching (3)

Faculty. Exploration of environmental problems and issues as they relate to science content instruction in the classroom and laboratory. The global systems approach will be stressed.

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 5056. General oceanography (3)

Faculty. Prerequisite: MSTC 4056-MSTC 4057 or equivalent. Fundamentals of physical and geological oceanography. Special attention to aspects of oceanography related to earth science in schools.

MSTC 5057. Coastal oceanography (3)

Faculty. Permission required. Prerequisite: MSTC 4056-MSTC 4057 or equivalent. Structure and change in coastlines and continental shelves, shelf resources, waves and currents, and environmental implications.

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.

Program for Pre-service Teacher Education

Program Advisors: Staff

MSTC 4000. Science in secondary school (2–3)

Faculty. Foundations of science education. Planning, assessment, and management of instruction. Required of pre-service students.

MST 4005. Teaching mathematics and science in diverse cultures (1–3)

Faculty. Principles, techniques, and issues in the teaching of mathematics and science in other cultural and national settings.

MSTC 4023. Mathematics for exceptional students (3)

Faculty. Content, methods, and instructional models for teaching exceptional students.

MSTC 4363. Science teaching practica for secondary education (1)

Faculty. Corequisite: MSTC 4000. Directed field experiences and seminars explore school environments and teaching strategies.

MSTC 4760. Student teaching in mathematics and science (4)

Faculty. Permission required. Prerequisites: MSTC 4000 or MSTC 5011. Open only to students enrolled in the pre-service program. Students do supervised teaching in metropolitan area schools. Mathematics students register for section 1; science students, section 2.

MSTC 5010. Mathematics in the elementary school (3)

See Program in Mathematics Education for course description.

MSTC 5011. Mathematics in the secondary school (3)

See Program in Mathematics Education for course description.

MSTC 5061. Evaluation in mathematics education (3)

Faculty. Theory and methods of evaluating pupils and programs in the cognitive and affective domains.

MSTC 5264. Guided supervision of student teaching in mathematics and science (2)

Faculty. Permission required. Open only to doctoral students. Guided field experience in supervising student teachers.

MSTC 5361. Guided supervision of mathematics and science teaching practica (2)

Faculty. Permission required. Open to advanced Master's students and Ed.D. students.

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 6400. Internship in mathematics and science 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.

MSTC 6500-MSTC 6501. Research seminar in mathematics and science education (0–3)

Faculty. 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. Science education students register for section 2 of each course. After initial registration for credit, doctoral students who wish to register in subsequent semesters may do so for 0 credits.

MSTC 6902. Research and independent study in science education (1 or more)

Permission required. For course description, see MSTC 6901.

MSTC 7500. Dissertation seminar in mathematics and science education (0–3)

Development of final doctoral dissertation proposals and presentation of proposals for departmental review.

MSTC 8900. Dissertation advisement in mathematics and 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 9900. Research and independent study in mathematics and 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
Telephone Number for Admission Inquiries: 212-678-3710
Fax: 212-678-3937
Web Address: <http://www.tc.columbia.edu/~academic/O&Ldept/>

Programs:

Educational Administration:

Educational Administration (including Private School Leadership)
Inquiry in Educational Administrative Practice
Educational Leadership & Management (a joint degree program with the Columbia Business School)

Higher and Adult Education:

Adult and Continuing Education
Adult Education Guided Intensive Study (AEGIS)
Higher Education
Higher Education Administration
Student Personnel Administration (SPA)

Nurse Executives

Social-Organizational Psychology

Faculty:

Professors:

W. Warner Burke (Social-Organizational Psychology)
Charles C. Harrington (Social-Organizational Psychology)
L. Lee Knefelkamp (Higher Education)
Henry M. Levin (Educational Administration)
Arthur Levine (Higher Education)
Victoria J. Marsick (Adult and Continuing Education)
Dale Mann (Educational Administration)

Craig E. Richards (Educational Administration)
Elaine L. Rigolosi (Nurse Executives)
Thomas Sobol (Educational Administration)

Adjunct Professors:

Stephen D. Brookfield (Adult and Continuing Education)
Paul J. Edelson (Adult and Continuing Education)
Keville C. Frederickson (Nurse Executives)
Joseph N. Hankin (Higher Education)
Joseph L. Moses (Social-Organizational Psychology)
Ruud van der Veen (Adult and Continuing Education)
Rita Reis Wiczorek (Nurse Executives)

Associate Professors:

William J. Baldwin (Higher Education)
Caryn J. Block (Social-Organizational Psychology)
Peter W. Cookson, Jr. (Adult and Continuing Education)
Jay P. Heubert (Educational Administration)
Pearl Rock Kane (Educational Administration)
Debra A. Noumair (Social-Organizational Psychology)
Margaret Terry Orr (Educational Administration)
Linda C. Powell (Educational Administration)
Frank L. Smith, Jr. (Educational Administration)
Lyle Yorks (Adult and Continuing Education)

Research Associate Professor:

Martha Gephart (Adult and Continuing Education)

Adjunct Associate Professors:

Tara A. Cortes (Nurse Executives)
Philip E. Fey (Adult and Continuing Education)
Harvey Kaye (Higher Education)

Assistant Professors:

Gregory M. Anderson (Higher Education)
Peter T. Coleman (Social-Organizational Psychology)
Elissa L. Perry (Social-Organizational Psychology)
Lisa Ann Petrides (Educational Administration)
Dorothy Shipps (Educational Administration)
James D. Westaby (Social-Organizational Psychology)

Lecturers:

Jeanne E. Bitterman (Adult and Continuing Education)
Amy Taylor (Social-Organizational Psychology)

Adjunct Assistant Professors:

Dallas W. Bauman, III (Higher Education)
Isara Bosch (Adult and Continuing Education)
Sarah T. Brazaitis (Social-Organizational Psychology)
Patrick P. Chang (Higher Education)
Allan Church (Social-Organizational Psychology)
Christine Coughlin (Nurse Executives)
Charles W. Fowler (Educational Administration)
Virginia G. Gonzalez (Adult and Continuing Education)
Wendy Heckelman (Social-Organizational Psychology)
Michael T. Koski (Social-Organizational Psychology)
Arthur Langer (Higher Education)
Georgenne G. Lasko-Weisenfeld (Educational Administration)
Barbara Macaulay (Adult and Continuing Education)
Gibran Majdalany (Educational Administration)
Susan Meyer (Adult and Continuing Education)
Lucienne Muller (Adult and Continuing Education)
Christine Persico (Adult and Continuing Education)
Mark L. Putnam (Higher Education)

Julie Ratner (Higher Education)
Vincent Rudan (Nurse Executives)
Richard E. Segall (Educational Administration)
Franceska Blake Smith (Adult and Continuing Education)
Barbara V. Strobert (Educational Administration)
Ross Tartell (Social-Organizational Psychology)
Elizabeth Haggerty Tucker (Nurse Executives)
Sally Vernon (Adult and Continuing Education)
Marie P. Volpe (Adult and Continuing Education)
Janine Waclawski (Social-Organizational Psychology)

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 from around the world. 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, organization behavior, and organization development 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 education, educational administration, nurse executive, higher education, and social-organizational psychology.

Departmental Core Requirements:

The Department requires that all students (except SPA-MA students), regardless of degree program, complete an overview in research methods course. Organizational Psychology majors are strongly advised to take ORL 4009, which emphasizes experiential in quasi-experiential research designs. Other majors are strongly advised to take ORL 5521, which emphasizes applied research designs.

ORL 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 evaluate social science research and learn how to begin 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 5002. Ethnography and participant observation: Comparative and qualitative analysis (3)
Professor Harrington. Prerequisite: ORL 5000. Issues of comparative and quantitative analysis of data generated by ethnographic/participant observation inquiries.

ORL 5521. Introduction to research methods in education (3)
Professors Knefelkamp and Shippis. 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.

The research course requirements are summarized in the grid below.

All Ed.D. students are required to complete an introductory statistics course and a two-course sequence in research design (data collection and analysis) in a methodology that is relevant to their dissertation. Students are to 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.

The grid on the following page lists the seven research designs, and course options for courses in methodological design and data analysis that are appropriate for each type of methodology.

Educational Administration
(Code: TA)

Program Coordinator: Professor Thomas Sobol
Educational Administration (including Private School Leadership)
Inquiry in Educational Administrative Practice
Joint Degree Program in Educational Leadership & Management
For Admission inquiries: (212) 678-3710
Program Office: (212) 678-3726 and -3139
Web Site: <http://www.tc.columbia.edu/~academic/o&ldept/ecadmin>
In depth information is published on our web page. Many of the forms referenced below

| General Research Requirements for the Department of Organization and Leadership | | | |
|---|---|--|---|
| Requirements | Degree program | Course Options | Requirement rationale |
| Overview research methods course | MA, MED, ED.D. (Except SPA MA students) | ORL 5521 Research methods in education (for students with applied research interests) <i>or</i> ORL 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. |

can be 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.)
A joint program, the Educational Leadership and Masters in Business Administration with the Graduate School of Business leads to the combined Ed.D./M.B.A.

Special Application Requirements/ Information:

Either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) is required of applicants to all degree programs in Educational Administration (M.A., Ed.M., Ed.D., and Ph.D.).

Master's degree applications received after the priority deadline, January 15th, for the Fall semester will be reviewed until April 15th on a space-available basis. There is no consideration of scholarships and assistance

for students applying after the priority deadline. Applicants to the Ed.M. in Educational Administration with a focus on Public School Administration should have at least three (3) years of teaching and/or administrative experience in the public schools (N-12).

Applicants to either the M.A. or Ed.M. program in Educational Administration with a focus on Private School Leadership should have at least three 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 doctoral 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, all doctoral applicants must submit: (1) either the GRE General Test or the MAT; (2) a one page, single-spaced analysis of the case problem below; and (3) personal statement including an indication of an intention to study on a full-time or part-time basis.

Applicants to the joint M.B.A./Ed.D. program in Educational Leadership and Management must be admitted both to Teachers College and to the Columbia University Graduate School of Business. The appropriate applications and supporting credentials must be submitted to each school. 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.

Program Descriptions:

The programs in educational administration prepare students for careers as successful practitioners and/or scholars capable of leading and transforming a wide variety of educating organizations.

| 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 Experimental Design HUDM 5124 Multidimensional Scaling and Clustering HUDM 6122 Multivariate Analysis |
| Survey Research Design | HUFD 5020 Methods of Social Research: Survey Methods HUDM 5552 Measurement of attitudes HUDM 5553 Questionnaire construction | HUFD 5029 (Sociological Research Methods) HUDM 5122 Applied Regression HUDM 5124 Multidimensional Scaling and Clustering HUDM 6122 Multivariate Analysis HUFD 6021 Social research methods: reporting |
| Applied Qualitative Research Design (including case study) | ORL 6500 Qualitative Research Methods on Organizations: Design and Data Collection C&T 5502 (1) & (2) Introduction to qualitative research in curriculum and teaching | ORL6501 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 ORL 5002 Ethnography and participant observation: comparative and qualitative analysis |
| Evaluation | HUFD 5021 Methods of social research: evaluation methods ITSF 4092 Qualitative research and evaluation in international education HUDM 5055 Evaluation of Institutions, programs and curricula HBSS 6100 Measurement and evaluation in health education | HUFD 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) |

Doctoral Admissions Application Case Study

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.

Graduates of these programs serve in leadership positions as school and school district administrators, policy analysts and advocates, and scholars of education and educational administration. Thus, the program prepares students to:

- Be thoroughly grounded in the theory and practice of educational leadership
- Have a broad and deep understanding of the historic and current role of educating institutions in our society
- Understand teaching and learning, and be able to support effective teaching and learning so as to optimize students' potential
- Understand the principles of organizational culture and behavior, and possess the 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 be 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 be able to apply its principles and methods in conducting inquiry and reviewing research

- Understand how legal and ethical considerations influence all aspects of education
- Be 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 of Educational Administration pursue a common core of studies in Leading Learning, Management Systems, Organizational Behavior, Policy Analysis and Politics, and Educational Research. This core is enriched by more specialized study in the student's specific area of interest, drawing on the extensive resources of the faculty in Educational Administration, the Department of Organization and Leadership, and Teachers College, and Columbia University.

The Educational Administration faculty offers the following programs:

Educational Administration with a focus in Public School Leadership
(M.A., Ed.M, Ed.D., Ph.D.)

These programs prepare students for positions of administrative leadership within the public schools and in public and private organizations that work with the public schools. The program of Inquiry in

Educational Administrative Practice offers an alternative route to the Ed.D. in Public School Leadership.

Educational Administration with a focus in Private School Leadership
(M.A., Ed.M.)

These programs prepare students for positions of administrative leadership within private schools and in organizations that work with private schools.

Educational Administration with a focus in Education Policy and Politics (M.A., Ed.M., Ed.D., Ph.D.)

These programs prepare students for such positions as policy analyst, policy advocate, and educational researcher.

Educational Administration with a focus in Education and Management (Ed.D./MBA) This program, offered jointly by Teachers College and the Columbia Business School, prepares students for positions in both the public and private sector that require knowledge and skill in both education and business management.

Master of Arts
(Code: TA)

The Educational Administration Program offers Master of Arts degrees with three areas of focus: public school administration, private school administration, and education policy and

politics. Individual program requirements are listed below.

Master of Arts in Educational Administration with a focus in Public School Administration

The Master of Arts with a focus on public school administration 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.

Students who have the required three years teaching experience in grades N-12 and who complete the program of study (including a minimum of 18 credits in administration and supervision and an administrative internship or its equivalent) may meet the New York State minimum requirements for the School Administrators and Supervisors (SAS) certificate. As individuals, students may make individual application to the New York Office of Teaching. Degree requirements may be completed in one year of intensive study or on a part-time basis. *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.*

Master of Arts in Educational Administration with a focus in Private School Leadership

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 Administration 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.*

Master of Arts in Educational Administration with a focus in Educational Policy and Politics
(33 credits)

The Master of Arts with a specialization in education policy and politics is intended for educators and non-educators considering entry level positions in education policy or management who do not require building-level certification. The policy concentration requires a sequence of courses including history of American education, economics of education, politics and policy analysis, educational leadership and change and educational evaluation methods. Students also complete a policy analysis project with a local or national education advocacy organization. Degree requirements may be completed in one year of intensive study or on a part-time basis.

Master of Education
(Code: TA)

Sixty points (at least 30 of which must be earned at Teachers College) are offered in three areas of focus: public school leadership, private school leadership, and education policy and politics. Course requirements for each program are as listed below.

Master of Education in Educational Administration with a focus in Public School Administration

The Master of Education Degree with a focus on 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.

Master of Education in Educational Administration with a focus in Private School Leadership

The 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 Educational Administration Program. The program of studies is similar to all requirements for the Master of Arts in Private School Leadership. 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 studies 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.*

Master of Education in Educational Administration with a focus in Education Policy and Politics
(60 credits)

The 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.

Doctoral Degrees

Four doctoral degrees in educational administration are offered by this Program: The conventional Ed.D./TA; the Inquiry (Ed.D./TAI), a concentrated, cohort program; the Joint Degree Program in Educational Leadership and Management (TAA, Ed.D./MBA). These three programs require 90 points for completion. A

maximum of 40 transfer credits may be accepted. The fourth program is the Ph.D. and is a research and theoretical program which may be completed in 75 credits.

Doctor of Education in Educational Administration
(Code: TA)

The program is designed with both theory and practice components. It serves professionals in education who intend to be actively involved in educational leadership at the building, district, regional, state or national levels. It also serves students aspiring to policy research, the professoriate, and employment in a variety of educational institutions and settings. Applicants who are admitted to this program will become eligible for certification on successful completion of 60–70 points of course work, a certification examination, and four clinical projects or other approved field experiences.

Thereafter, candidates will complete their remaining course work while preparing a dissertation under the direction of faculty in the program. The doctoral degree in educational administration 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.)

Most classes are scheduled between 5:00 P.M.–9:00 P.M. during the Spring and Fall semesters. Additionally, there are two Summer sessions with classes scheduled throughout the day. 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 Education: Inquiry in Educational Administrative Practice (Code: TAI)

Program Director: Professor Thomas Sobol

The INQUIRY program offers practicing, certified school administrators an opportunity to complete a rigorous doctoral program while continuing to practice. It prepares committed men and women for lives of leadership and service in educating institutions of all kinds. Its chief objectives are to:

- Strengthen students' ability to lead educating institutions as purposeful, effective, humane organizations.
- Stimulate inquiry into problems encountered in professional practice.
- Broaden and deepen reflection about values, trends, and issues that affect the education enterprise.
- Provide skills and knowledge needed for the effective leadership and management of complex organizations in a sophisticated technological society.
- Create and sustain a learning community committed to continuous learning and mutual support.

The 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.

As colleagues in a close-knit cohort, students attend classes over a two-year period, working in teams as well as individually. (Additional 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 program in Educational Administration, the content, degree requirements, and standards of performance remain the same. No academic credits are awarded for work experience.

The first intensive weekend seminar for the 2001 cohort will be on Friday through Sunday, May 18–20, 2001. The first extended campus-based courses run from Monday, July 9, 2001 through Thursday, August 2, 2001.

Prospective students are encouraged to apply early. Applications and all supporting documents must be received in the Admissions Office by January 2, 2001. *Contact: Professor Thomas Sobol (212) 678-3783.*

Doctor of Education and Master of Business Administration: A Joint Program (Ed.D. /M.B.A.-Code TAA)

Joint Degree Program in Educational Leadership & Management (with the Columbia University School of Business)
Program Coordinator: Professor Lisa Ann Petrides

The joint degree program with the Graduate School of Business of Columbia University and the Department of Organization and 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: Professor Lisa Ann Petrides (212) 678-3370.*

Doctor of Philosophy (Code: TA)

The Ph.D. in Educational Administration is designed for researchers, aspiring professors, and policy analysts, emphasizing research and intensive specialization in a field of scholarship. 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 admittance to the Ed.D. program. Before making application to the Ph.D. program in Educational Administration, prospective applicants are urged to consult with *Professor Dale Mann, (212) 678-3727.*

Non-Degree Programs

In addition to the degree programs previously described, the Educational Administration Program offers several profes-

sional development opportunities to both first-time students and to alumni interested in continuing their graduate education. These are listed below.

Klingenstein Fellows Program

Program Coordinator: 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 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 four-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, organization development, and institutional and policy analysis. 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 of the preceding year. *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, simula-

tions, case studies, and team work. *Contact: Professor Peter Cookson (212) 678-3987.*

Principals Work Conference

The Educational Administration 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: Professor Peter Cookson (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 nomination and invitation.

Contact: Professor Thomas Sobol (212) 678-3783.

Financial Assistance

All new students seeking to be eligible for any type of financial assistance, must complete the Teachers College Financial Aid Application included in this Catalog. To be considered, students must complete their application by the priority deadline. Minority candidates interested in educational leadership in urban settings may qualify for fellowships.

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.

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 Educational Administration Program as described in the Handbook or "Guide" (see also, Web page <http://www.tc.columbia.edu/~academic/o&ldept/edadmin>); and (3) your faculty advisor.

General and Research

ORL 5521. Introduction to Research Methods in Education (3)

Professors Knepfkamp and Shipp. 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. When registering please use

correct section number as listed by Professor below.

- Section #01—Professor Smith;
- Section #02—Professor Petrides;
- Section #03—Professor Sobol;
- Section #04—Professor Kane;
- Section #05—Professor Mann;
- Note: there is no Section 6.
- Section #07—Professor Heubert;
- Section #08—Professor Richards;
- Section #09—Professor Orr;
- Section #10—Adjunct Professors;
- Section #11—Professor Powell;
- Section #12—Professor Shipp.

ORLA 5051. Program leadership: Cases (2)

Faculty. Permission required. Case studies in a simulated school system.

ORLA 5830. The Klingenstein summer institute (4)

Professor Kane. Permission required. Enrollment limited. An intensive residential program that introduces young liberal arts graduates to the complexity and challenge of teaching in independent schools. Topics include curriculum and assessment, understanding school organizations, issues of diversity and philosophy.

ORLA 6211-ORLA 6241. Clinical projects in educational administration:

Faculty. Permission required. Four clinical projects (one each in organizational analysis, management science, policy analysis, and institutional analysis) are required for the Ed.M. and the Ed.D. and to meet New York State's Administrator Certification requirements. Two clinical projects are required for the M.A. degree. Two clinical projects must be completed by students in the doctoral program to be eligible to take the Program's certification examination. Additional information is available from the printed leaflet entitled *Clinical Projects* available in the Program Office, our Web page, or from your Academic Advisor. Note: Clinical Projects may also be completed in *regular courses* in which students are enrolled.

- ORLA 6211. Section 1—Clinical project: Organizational analysis (1–4 per section)

- ORLA 6221. Section 1—**Clinical project: Management science** (1–4 per section)
- ORLA 6231. Section 1—**Clinical project: Institutional analysis** (1–4 per section)
- ORLA 6241. Section 1—**Clinical project: analysis** (1–4 per section)

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.

Section #01—Professor Smith;
Section #02—Professor Petrides;
Section #03—Professor Sobol;
Section #04—Professor Kane;
Section #05—Professor Mann;
Note: there is no Section 6.
Section #07—Professor Heubert;
Section #08—Professor Richards;
Section #09—Professor Orr;
Section #10—Adjunct Professors;
Section #11—Professor Powell;
Section #12—Professor Shipp.

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** (4 per section) Professor Kane. Permission required.

ORLA 5690. **Klingenstein colloquium: Fellows** (1–3) Professor Kane. Permission required.

ORLA 6611. Sec. 1—**Colloquium: Organizational behavior** (3) Professor Smith. Discussion of historical development of perspectives and paradigm shifts in the study of organizations. Greater emphasis is placed on organizational cultures and on the meaning of politics as a community building process. A central question concerns the meaning of information technology for leadership in the reform and development of schools as institutions. Active participation in colloquium format based on selected readings.

ORLA 6621. Sec. 1—**Colloquium: Management science** (1–4 per section) Professor Richards. Permission required.

ORLA 6631. Sec. 1—**Colloquium: Institutional analysis** (1–4 per section) Professor Kane. Permission required.

ORLA 6641. Sec. 1—**Colloquium: Policy analysis and action** (1–4 per section) Professor Orr. Permission required.

ORLA 6900. **Research and independent study in educational administration** (1 or more). Special individualized work. Permission required.

Section #01—Professor Smith;
Section #02—Professor Petrides;
Section #03—Professor Sobol;
Section #04—Professor Kane;
Section #05—Professor Mann;
Section #06—Inquiry Program only;
Section #07—Professor Heubert;
Section #08—Professor Richards;
Section #09—Professor Orr;
Section #10—Adjunct Professors;
Section #11—Professor Powell;
Section #12—Professor Shipp.

ORLA 7500. **Dissertation seminar in educational administration** (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 disserta-

tion 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.

Section #01—Professor Smith;
Section #02—Professor Petrides;
Section #03—Professor Sobol;
Section #04—Professor Kane;
Section #05—Professor Mann;
Section #06—Inquiry;
Section #07—Professor Heubert;
Section #08—Professor Richards;
Section #09—Professor Orr;
Section #10—Adjunct Professors;
Section #11—Professor Powell;
Section #12—Professor Shipp.

ORLA 7570. **Research in administration** (1–4 per section) Faculty. Permission required.

Advanced seminar involving a critical review of important works in educational administration 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.

Section #01—Professor Smith;
Section #02—Professor Petrides;
Section #03—Professor Sobol;
Section #04—Professor Kane;
Section #05—Professor Mann;
Section #06—Inquiry;
Section #07—Professor Heubert;
Section #08—Professor Richards;
Section #09—Professor Orr;
Section #10—Adjunct Professors;
Section #11—Professor Powell;
Section #12—Professor Shipp.

ORLA 8900. **Dissertation advisement in educational administration** (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 administration** (1 or more) For Post Docs only.

Institutional Analysis

ORLA 4031. **Leadership and institutional analysis: Early childhood education administration** (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 and institutional analysis: Administration of secondary schools** (3) Professor Smith. Organizing and administering 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 and institutional analysis: Administration 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)

Professor Smith. 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 support and implementation consequences, and analysis of how both experimental and systemwide change is created.

ORLA 4060. Designing Charter Schools (3)

Professor Smith. 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 institutional 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 5052. Program leadership (2-3)

Professor Smith. 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 (3)

Professor Kane. A comprehensive examination of contemporary edu-

cational issues in public and private schools to provide a context for analyzing and understanding the independent school 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 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 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 dilemmas arising from the professional literature, the humanities, and the student's own practice.

ORLA 4071. The administration of private schools (3)

Professor Kane. 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 5012. Sec. 1—Community politics, community policies, and administrators (3)

Professor Mann. Political analysis of administration at the service delivery and community levels.

ORLA 5016. Section 1 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.

ORLA 5017. Groups and interpersonal behavior (2-6)

Professor Powell. Organizational behavior with reference to interpersonal relationships and the conflicts resulting from the needs of individuals compared to the demands of the organization. Special Permission required. Special fee: \$50.

ORLA 5018. Understanding Authority and Exercising Leadership (3)

Professor Powell. 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 milieux. Includes collaborative action research and conflict resolution training.

ORLA 5054. Program leadership: Advanced cases and concepts (3)

Professor Smith. 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. Section 1 Behavioral analysis of leadership (3)

Professor Smith. 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)

Professor Smith. Permission required. Emphasis upon classic studies and analysis of the implications of research for organization theory and administrative practice.

Management Systems

ORLA 4021. Section 1 Introduction to management systems (3)

Professor Petrides. Co-requisite: ORLA 4022. An introduction to the fundamental principles and concepts of management information systems. The course examines the management of information systems across several different types of organizations, with an emphasis on the management of education-related information systems in K-12 as well as in institu-

tions of higher education. The course explores both the theoretical as well as practical implications of information systems. Several key themes are addressed, such as: looking at how information systems can increase the problem-solving capabilities within an organization or school; and exploring how information can enable leaders to perform their jobs more effectively. Special fee: \$50.

ORLA 4022. Introduction to management systems-lab (1)
Co-requisite: ORLA 4021. The purpose of this lab is to provide students with technical hands-on computer experience in web-based technologies and database design. This lab is designed to build the capacity of students to conceptualize and develop data-based information systems. Students will be introduced to resources and participate in exercises related to the design, implementation, and maintenance of an information system.

ORLA 4025. Section 1 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 will 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 strategies and strategies for growth and communication. Students will 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 will 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. Section 1 Information systems for decision making in learning organizations (3)
Professor Petrides. 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)
Professor Petrides. 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. Section 1 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. Sec. 1. Program leadership: Grants funding workshop (3)
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 hour 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)
Professor Petrides. 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 4030. Ethical issues of educational leadership (3)
Professor Sobol. The ethical implications of educational issues, with a focus on the moral imperatives and moral dilemmas of educational leadership.

ORLA 4040. Education policy decision making (3)
Professor Mann. 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.

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?

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 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 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 non-school-based educating institutions.

ORLA 5544. Current topics in policy analysis for administrators (3)

Professor Mann. 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)**
Professor Mann. 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 (3)

Professor Shippis. 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.

Higher and Adult Education

(Code: TD)

Adult and Continuing Education

Adult Education Guided Intensive Study (AEGIS)
Adult and Continuing Education

Higher Education with specializations in:

Higher Education Administration
College Teaching and Academic Leadership
Student Personnel Administration

Adult and Continuing Education

(Code: TDA—M.A. and Ed.D. ACE program)

(Code: TDS—Ed.D. AEGIS program)

Program Coordinator: Professor Victoria Marsick

For Admission inquiries: 212-678-3710

Program Office: 212-678-3760

Degrees Offered:

Master of Arts (M.A.)

Doctor of Education (Ed.D.)

Special Application

Requirements/Information:

ACE

An academic writing sample is required for applicants to the EdD degree.

AEGIS

The AEGIS program 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

AEGIS COURSE SCHEDULE

| | | |
|-----------|------------------------------------|--|
| YEAR I | Summer (Three week session) | |
| | ORLD 6909 | Program Development (3) |
| | ORLD 6800 | Life-History (2) |
| | ORLD 6902 | Proseminar in Adult Education (3) |
| | Autumn | |
| | ORLD 6908 | Adult Education Theory (3) |
| | ORLD 6800 | History of Adult Education (1) |
| | ORLD 6918 | Introduction to Research (3) |
| | Spring | |
| | ORLD 6904 | How Adults Learn (3) |
| ORLD 6800 | Higher Adult Education (1) | |
| ORLD 6803 | Qualitative Research (3) | |
| YEAR II | Summer (Three week session) | |
| | ORLD 6912 | Advanced Seminar I (3) Workshop: Certification Exam Preparation (0) |
| | HUDM 5021 | Empirical Research (3) |
| | Autumn | |
| | A&HF 4084 | Social Philosophy (3) |
| | ORLD 6800 | Literacy/Adult Basic Education (1) |
| | ORLD 6918 | Advanced Research (3) |
| | ORLD 6914 | Directed Dissertation Research (2) |
| | Spring | |
| | ORLD 6918 | Advanced Seminar II (3) |
| ORLD 6800 | Workplace Learning (1) | |
| ORLD 6918 | Advanced Research (3) | |
| ORLD 6914 | Directed Dissertation Research (2) | |
| YEAR III | 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 course work, 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, candidates can enroll in ORLD 7900, a seminar that meets on AEGIS weekends for additional guidance in their research.

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) are also required.

The application essay (prior page) should not exceed ten double spaced pages. If the application materials are acceptable, applicants will be invited to campus for a day for an interview. They will also be asked to complete a second on-site writing assignment at that time.

Early admission decisions are made in December of the year preceding the beginning of the program. Applicants who want to be considered for an early admission decision should make sure that their materials are submitted by October 1 of the year preceding the beginning of the program and will be interviewed in November. Applicants submitting materials by December 1 of that year, will be interviewed in February. The admission deadline is December 1. Final admissions decisions are normally made by March of the year in which the program begins.

Program Descriptions:

Adults face new demands for lifelong learning in order to flourish in a rapidly changing environment. Leaders in organizations and communities of all types have also taken fresh interest in adult and organizational learning in order to draw effectively on the resources of their entire institutions.

The Adult Education graduate program, which offered the first degree in this field in the United States, prepares professionals who lead, design, implement, and evaluate programs that are based on principles of Adult and Organizational Learning (AOL). The program develops scholar-practitioners who can think critically about their practice in

relation to theory, and apply theory effectively in their practice. The program develops capabilities in critical thinking and transformative learning; and in individual and collective learning relating to social and organizational change.

Master of Arts

Organizations of all kinds—private sector business, health-care institutions, government agencies, and not-for-profit institutions—are changing rapidly in order to meet their customers' needs in a global economy and high technology, knowledge era. Learning is a key ingredient to their success, learning that is:

- Linked to performance
- Active, integrated with work, and designed around real-world problems
- Available just-in-time and through alternative formats and technologies
- Captured and shared as organizational learning.

The M.A. in Adult and Continuing Education, with a concentration in Workplace Learning, Training, and Development is designed for those who work, or wish to work, in organizations as human resource developers and adult educators. It provides students with up-to-date theory and the opportunity to learn more about best in-class practice. They way, they can more effectively design, manage, deliver, and evaluate interventions for adult and organizational learning in this changing environment.

Doctor of Education

This program, leading to the Doctor of Education in Adult and Continuing Education, is designed for experienced leaders of adult education policy and programs who are interested in research and theory-building as it relates to adult and organizational learning. The curriculum

includes core courses on adult development and learning, as well as the development of research competence. Students develop tailored programs that link to course work in other programs within the Department and across the College depending on the context within which they work: private, public, and nonprofit organizations; higher and continuing adult education; or adult basic education in community and social action settings.

Doctor of Education, AEGIS track

AEGIS is a highly selective, fast-track cohort program leading to the Ed.D. in Adult and Continuing Education for mid-career professionals who work full time, and who choose to pursue a doctorate in a concentrated format. The program emphasizes leadership for adult and organizational learning. Scholar practitioners are helped to examine and critique theory and professional experience.

Course work is completed over a two-year period. Participants attend a concentrated three-week session at Teachers College in each of three summers. During the academic year, they meet for Friday evening and Saturday seminars four times each semester for a total of four semesters. Courses are not open to students from other programs. *Special tuition: \$8,000 per semester. Tuition may be subject to change.*

AEGIS students earn 50 points at Teachers College in a structured program that provides required courses in three areas: theory, research, and the study of professional practice in different settings in which adults learn. Students must also pass a certification examination, and complete a dissertation.

Degree Requirements:

All doctoral candidates must meet departmental requirements in research, statistics, data collection and analysis. These courses are summarized in the grids on the preceding pages. For other specific required courses, students should consult with their advisors.

Master of Arts

Students gain an M.A. by earning either 30 points and doing a research-based essay; or 32 points and a written, integrative project that applies learning to real work challenges. Illustrative projects include: guidelines for developing a corporate mentoring program, assessment of an action learning project in a utility, a review of coaching models in use in corporations, a plan for developing a learning culture in a retail stores organization, or a sales service training program.

The program consists of one required course on understanding research (ORL 5521 or ORLJ 4009 and five required core courses in workplace learning: Theory and Practice of Adult Learning (ORLD 4050), Designs for Facilitating Adult Learning (ORLD 4053), Needs Assessment and Evaluation (ORLD 4052), Staff Development and Training (ORLD 5055), and The Learning Organization (ORLD 5061). Students select among alternative breadth courses in two related areas: organizational dynamics and technology that supports workplace learning. Finally, the remainder of a student's program is tailored to career goals by selecting from courses in the Department and across the College. Students can take courses at the Columbia University Business School if they wish, and can receive credit for learning from up to 200 clock hours of internships.

Doctor of Education

(ACE track—Code: TDA)
The Ed.D. requires a minimum of 90 points of graduate course work, a certification examination, and a dissertation.

Core areas of study include the following:

- adult development and adult education theory and methods
- organizational learning theory, design, and implementation
- program design, implementation, management, and evaluation
- research methods, with emphasis on applied field research using quantitative and qualitative methods
- special interest courses that emphasize organizational culture and context in different settings

In addition to courses that we provide, students must take course work in:

- organizational and institutional context courses as relevant to the level and focus of study
- disciplinary studies as relevant to the level and focus of study, e.g., history, social sciences, anthropology, or psychology as it relates to adult learning and education
- understanding and/or conducting research as relevant to the level and focus of study

Higher Education

Program Coordinator:
Professor L. Lee Knefelkamp
For Admission inquiries:
212-678-3710
Program Office: 212-678-3750

Degrees Offered:

- Master of Arts (M.A.)
Student Personnel Administration (Code: TDH)
Higher Education Administration (Code: TDJ)
- Master of Education (Ed.M.)
Student Personnel Administration (Code: TDH)

Higher Education Administration (Code: TDJ)
Doctor of Education (Ed.D.)
Higher Education (TDJ)

Special Application

Requirements/Information:
Applications are considered for fall enrollment only.

The Master of Arts programs are designed for persons preparing for general administrative positions, or who are already employed in entry-level positions in universities, two- and four-year colleges, technical institutes, professional schools, and non-profit organizations.

The Master of Education programs are available to those who have at least two years of professional experience who wish to engage in advanced study without undertaking the commitment of a doctoral program.

Applicants to the doctoral program should submit a scholarly writing sample with their applications. It is recommended that doctoral applicants have a masters degree as well as pertinent work experience.

Program Description:

As the field of higher education becomes more complex, the need for well-prepared, carefully trained leaders becomes increasingly more important. The Higher Education program at Teachers College is dedicated to the mission of helping provide exceptional leaders to colleges and universities, both in the United States and abroad. The program is committed to a philosophy of education which builds constructively on contemporary theories developed in research and practice as they are imaginatively applied to educational problems. It is a blend of offerings in theoretical foundations of educational thought and of training in practical application of those theories.

Advanced preparation for work in higher education includes elements of education in the basic liberal arts and social science disciplines and advanced instruction in a field of scholarship and education related to professional practice. The program also hopes to foster an integrated perspective among administration, organizational analysis and development, behavior and management, teaching, counseling, multicultural issues, adult development theory and practice, and higher education policy.

The program in Higher Education prepares educators and leaders for administrative and academic positions in a broad range of post-secondary educational institutions. Our mission is two-fold: First and foremost, we prepare scholar-practitioners who create and implement cutting-edge policy based upon enhanced skills as professional educators, researchers, and theory-builders. Second, we develop a smaller number of researcher-theorists who prepare professionals in the field of higher education.

The program has been designed to provide professional preparation and assist students in developing their expertise as administrators, practitioners, researchers, and college faculty and in related state and federal offices and foundations. It bears special responsibility for preparing leaders to the degree that its graduates have unique opportunities to shape organizational goals, to influence the character of educational programs, and to affect institutional performance.

Graduates of our program have served as presidents, vice-presidents, deans of students, academic deans, academic department chairs, graduate faculty, business managers, financial aid officers, admissions direc-

tors, registrars, development officers, college union directors, affirmative action officers, multicultural affairs coordinators, placement directors, public relations offices, directors of institutional research and planning officers, as well as in other positions of institutional, state, and national leadership.

The Higher Education program uses a pedagogical approach that incorporates areas of study that are fundamental to effective higher education administration both now and in the future: administration and leadership, instructional design and teaching, adult learning and development, and multicultural issues and concerns.

The program in Higher Education offers three degree programs: Master of Arts (offered in both Student Personnel Administration and Higher Education Administration), Master of Education (offered in both Student Personnel Administration and Higher Education Administration) and a Doctor of Education in Higher Education with five opportunities for specialization: 1) College Teaching, 2) Organization Leadership, 3) Student Personnel Administration, 4) Student Development, and 5) Educational Policy. While there are three areas of specialization, there are not mutually exclusive paths to professional preparation. All students are required to be proficient in each of these areas.

Master of Arts

The field of student affairs has a long and proud tradition of supporting and enriching the personal and academic lives of college students and of improving the administrative functioning of student services offices. The SPA program, as the first graduate program in

Student Personnel Administration in the world, has an historic role in that tradition. The M.A. program is designed for people interested in student affairs work in colleges, universities, two-year institutions and professional schools. Students in this program focus additional attention reflecting on the increasing diversity on today's college campuses with respect to race, ethnicity, nationality, gender, and age. The student body is comprised of recent college graduates, career-enhancers, and individuals seeking career changes.

The program uses a pedagogical approach that incorporates four primary perspectives: administration and leadership, adult development theories, counseling, and multicultural and diversity issues and concerns. Graduates are therefore prepared to help with the growth and development of all college students, address multicultural concerns throughout their institutions, implement administrative skills and knowledge, as well as demonstrate counseling abilities and other helping skills.

The 32 point Master of Arts program in Higher Education Administration is designed for persons preparing for general administrative positions, or who are already employed in entry-level positions in universities, two- and four-year colleges, technical institutes, professional schools, and non-profit organizations.

Master of Education

The Ed.M. program in Student Personnel Administration has been designed to provide professional competencies in each of the following areas: (1) Foundational studies—this area includes study in the historical, philosophical, psychological, cultural, sociological, and

research foundations of higher education; (2) Professional Studies—student development theory, student characteristics and effects of college on students, individual, group and organizational behaviors and interventions, organization and administration of higher education and student affairs, assessment, evaluation, and research; (3) Supervised Practice; (4) translation of theoretical knowledge about the development of organizations, groups, and individuals into purposeful practice; and (5) multicultural awareness, knowledge, and skills. Clearly, this program has been designed to exceed the Council for the Advancement of Standards in Higher Education (CAS) guidelines.

The Master of Education degree program, a 60-point program provides specialized professional preparation in such areas as leadership and management, organizational theory, and finance. It also provides a specialization component for doctoral students, who ordinarily meet Ed.M. requirements in the course of working toward the doctorate.

The Ed.M. or M.A. degree recipient will have professional competencies in each of the following areas:

- understanding and defining the role and functions of student personnel work in higher education
- identifying factors affecting human and organizational behavior
- translating theoretical knowledge about the development of organizations and individuals into meaningful practices of the profession
- interpreting research significant to the profession and conducting and applying related research at an rudimentary level
- performing the functions of program assessment, design,

implementation, and evaluation, as appropriate.

Graduates of this program are prepared to seek employment in a variety of student affairs and higher education settings such as: academic advising offices, academic support offices, student activities centers, Greek and other student organizations advisement centers, career planning and placement offices, residence life offices, HEOP, TRIO, and minority student affairs offices, student unions, orientation offices, learning centers, admission offices, financial aid offices, commuter affairs offices, college and university staff training and development offices, etc.

Doctor of Education

The doctoral program in Higher Education has been designed to provide professional preparation and to assist doctoral students in developing as expert administrators, practitioners, researchers, and college faculty and in related state and federal offices and foundations. The program bears special responsibility for preparing leaders to the degree that its graduates have unique opportunities to shape organizational goals, to influence the character of educational programs, and to affect institutional performance. Graduates of this program have served as presidents, vice-presidents, deans of students, academic deans, graduate faculty, business managers, financial aid officers, admissions directors, registrars, development officers, college union directors, affirmative action officers, multicultural affairs coordinators, placement directors, public relations offices, directors of institutional research and planning officers, as well as in other positions of institutional, state, and national leadership.

Degree Requirements:

Note the basic research requirements for all students in the department located on pages 226–227.

Master of Arts (Higher Education Administration)

The M.A. in Higher Education requires a minimum of 32 points of graduate course work and a comprehensive departmental project.

Master of Arts (Student Personnel Administration)

The M.A. requires a minimum of 32 points of graduate course work, an intensive internship (approximately 15–20 hours per week), and a comprehensive examination.

Master of Education (Higher Education Administration)

The Ed.M. in Higher Education Administration requires a minimum of 60 points and an Integrative paper.

Master of Arts (Student Personnel Administration)

The Ed.M. in Student Personnel Administration requires a minimum of 60 points of graduate course work, an internship, and a comprehensive examination.

Doctor of Education

The Ed.D. in Higher Education requires a minimum of 90 points of graduate course work, a certification examination, and a dissertation.

Course work is completed in the following areas:

| | |
|---|-------|
| Program core courses | 27 |
| Theoretical foundations/ broad and basic areas of scholarship | 9 |
| Specialization | 15 |
| Modes of inquiry/research/ preparation for dissertation | 15–21 |
| Provision for individual needs and interests/ electives | 18–24 |

Courses:

ORL 5521. Introduction to research methods in education (3)

Faculty. 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 (3)

Professors Knefelkamp and Levine. 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. 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)

Dr. Baldwin. 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)

Professor 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: multi-disciplinary 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)

Faculty. 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)

Dr. Chang. 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 4050. Introduction to adult and continuing education (3)

Dr. Bitterman and Dr. Persico. 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 and Dr. Gonzalez. Role and perspective changes in adulthood, concepts of maturity, learning theories, personality development, cognitive learning and thinking, creativity, interests and attitudes, motivation, 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 in-field 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 re-frame their practice.

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 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 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.

ORLD 5011. College teaching and learning (3)

Professor Knefelkamp. Designed for individuals who aspire to college teaching, this course emphasizes research on student learning, multiple pedagogies (such as experiential learning, learning commu-

nities, 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)

Professor Anderson. 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 Knefelkamp and Anderson. Critical analysis of cultural diversity in American higher education with respect to the curriculum, co-curriculum, and institutional structure. Presents new paradigms with which to understand the complexities of response that are necessary to adequately meet the needs of all students.

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 5053. Organization and administration of adult and continuing education (3)

Dr. Fey. Organization studied in relation to community structure and social forces. Finance and facil-

ities, personnel, program, and community relations. Major emphasis on case analysis.

ORLD 5055. Staff development and training (3)

Professor Marsick, Dr. Meyer, and Dr. Volpe. 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 non-collegiate settings. Current developments, innovative practices, and issues.

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 (3)

Dr. Van Der Veen and Professor Marsick. A 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. Advanced staff development and training (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 organizational learning. Readings and case studies provide insight into learning at individual, group, and organizational levels. ORLD 5055 or its equivalent is a prerequisite.

ORLD 5241-ORLD 5242. Observation and supervised fieldwork in student personnel administration (3)

Dr. Bauman. 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 application to higher education. Primary areas of focus include: 1) intellectual and ethical development 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 of higher education (2-3)**

Faculty. 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)**

Professor Knefelkamp. 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 postsecondary 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 account-

ing, cost benefit analysis, and discounted cash flow. Emphasis on applied financial decision making.

• **ORLD 5536. College classroom assessment (3)**

Professor Knefelkamp and Dr. Kaye. An in-depth study of major assessment techniques for the college classroom. Particular attention will be paid to the work of Patricia Cross, Thomas Angelo, and Dick Light, as well as assessment models associated with collaborative learning, teaching portfolios, and student portfolios.

• **ORLD 5537. College classroom assessment research (3)**

Professor Knefelkamp and Dr. Kaye. Prerequisite: ORLD 5536. In-depth study of classroom research methods based on the classroom assessment methods studied in ORLD 5536.

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 year.

ORLD 6241. Advanced fieldwork in student personnel administration (2-6)

Permission required. Open to part-time and full-time doctoral students. Forty hours of work required for each point of credit.

ORLD 6511. Coordinating seminar in higher education (3)

Professors Knefelkamp and Anderson. 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)
Faculty. 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 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 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 Knefelkamp and Anderson. 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 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.

ORLD 9900. **Research and independent study in higher and adult education (2 or more).**

See also:
Program in Educational Administration:
ORLA 4010. **Introduction to organization and change theory in education (3)**
ORLA 5017. **Organizations and interpersonal behavior (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)**

Department of Arts and Humanities:
A&HF 5070. **History and theory of higher education (3)**
A&HF 4054. **Education and manpower planning (3)**

Department of Mathematics, Science, and Technology
MSTU 4030. **Computer applications in education (3)**

Nurse Executives

Program Coordinator:
Professor Elaine L. Rigolosi
For Admission inquiries:
212-678-3710
Program Office: 212-678-3421

(Code: TNZ—M.A.
Accelerated)
(Code: TNO—Ed.M., Ed.D.)
(Code: TNX—Ed.D.
Accelerated)

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

Special Application Requirements/Information:

Master of Arts

In addition to the requirements for admission to Teachers College, 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, 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.
- In lieu of the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT), applicants whose native language is not English must have a score of 600 or greater on the TOEFL examination (or a 250 on the computer-based equivalent), or a Level 10 on the American Language Program (ALP) test offered by Columbia University. 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 2002 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, with exit points of achievement at the levels of Master of Arts (48 points) and Master of Education (60 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 are \$9,000 per semester of study and include tuition, fees, books and refreshments. The cost of the program is subject to change. The following is an example of a masters cohort sequence* by semester:

Degree Requirements:

Note the basic research requirements for all students in the department located on pages 226–227.

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 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

- Leadership and Management for Healthcare Organizations (3)
- Theories of Nursing (3)
- Health Problems and Issues in Society (3)
- Fiscal Management of the Nursing Organization (3)

Semester II

- Personnel Management in Healthcare (3)
- Nursing Science (3)
- Basic Concepts in Statistics (3)
- Informatics in Nursing (3)

Semester III

- Methods of Nursing Research (3)
- Administration of a Nursing Organization (3)
- Crisis Intervention (3)

Counseling in Business and Industry (3)

Semester IV

- Legal Issues for Healthcare Professionals (3)
- Colloquium in Nursing Administration (3)
- Methods of Empirical Research (3)
- Seminar: Clinical Teaching and Evaluation (3)
- *Courses and/or sequence are subject to change.

Master of Education

The Master of Education degree in the Program for Nurse Executives requires a minimum of 60 points beyond the baccalaureate degree. At least 30 points must be earned at Columbia University; at least 18 of these points under the auspices of Teachers College. Applicants who hold the degree of Master of Arts and Master of Science from accredited universities may transfer a maximum of 30 points of work to the Master of Education degree. Candidates who have completed the Master of Arts through Teachers College must offer a minimum of 45 points of the required 60 points under the auspices of Teachers College. For program course sequence recommendations, please see the Master of Education "Advisement Guide" that can be obtained from the office of the Program for Nurse Executives.

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. Program costs are \$9,000 per semester of study and include tuition, fees, books and refreshments. The cost of the program is subject to change. 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

- Probability & Statistical Inference
- Interdisciplinary Theory in Nursing
- Marketing Nursing Programs & Services

Semester II

- Methods of Nursing Research
- Work-Family Issues: A multidisciplinary approach
- Colloquium in Nursing Administration

Semester III

- Nursing Research Development
- Social Philosophy & Education
- Health Care Policy & Analysis

Semester IV

- Dissertation Design Development—Section I
- Dissertation Design Development—Section II
- Managing the Socially Responsible Organization

Semester V

- Designing, Planning and Monitoring the Health Care System
- Advanced Dissertation Design Development—Section I
- Advanced Dissertation Design Development—Section II

Semester VI

- Innovation in Nursing Management
- Advanced Management Information Systems
- Guided Study—Section I & II

**Courses and/or sequence are subject to change*

NOTE: After course work, candidates must enroll in ORLN 8900, Continuous Dissertation Advisement, 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, interdisciplinary 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 non-nurses, from other departments and divisions.

Nursing Theory

ORLN 4005. Theories of nursing (3)
Faculty. Theoretical foundations of nursing. Critical analysis of theories that explain the nature of nursing practice.

ORLN 5000. Nursing science (3)
Faculty. Prerequisite: ORLN 4005. Examination of emerging issues in nursing research and healthcare. Relevance to theory development and health policy are emphasized.

ORLN 5005. Interdisciplinary theory in nursing (3)
Faculty. Prerequisites: ORLN 4005, ORLN 4050, or equivalent. Evaluation of utility of theories and models from related disciplines in posing research problems in nursing. Focus on strategies of concept analysis and theory derivation.

ORLN 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.

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 (3)
Faculty. Prerequisites: ORLN 5040 and ORLN 5043. An introduction to the theory and practice of archives administration and historical 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 College 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.

ORLN 8900. Dissertation advisement in nursing (0)

Individual advisement on doctoral dissertation following completion of all course work. Fee equal to 3 points at current tuition rate for each term. For continuous requirements, see section in catalog on Continuous Registration for Ed.D. degree.

ORLN 6940. Independent study in nursing research (1-6)

Permission required. Allows student to contract with 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 evaluating 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 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

On the master's level, preparation for this role is identical with preparation for the professorial role. The same courses are used for this purpose.

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 (3)**
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.

Social-Organizational Psychology

Program Coordinator:
Professor Caryn Block
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

Persons from a variety of academic backgrounds and work experiences may qualify for admission to the program. Those applicants without an adequate background in psychology, however, will be required to take up to 5 additional courses beyond the 32

credits that are the minimum number necessary for completion of the program. Primary consideration for admission is given to previous academic record, work experience and letters of reference. GRE scores are not required for admission into the M.A. program.

Doctor of Education and Doctor of Philosophy

Applications are considered once a year for the fall semester only and should be completed and submitted with other forms of information required 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 their undergraduate major. 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, policy-making, or research.

Program Description:

The Social-Organizational Psychology program is concerned with the various contexts (interpersonal, group, intergroup, and organizational) in which human behavior occurs; the ways in which groups of individuals interact and influence these contexts; and how these interactions can be understood, studied, and modified

through theory, research, and various types of interventions.

The programs provide advanced training in the concepts, research methods, and applications of social 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 in diverse institutional and organizational contexts.

Courses in these programs are supplemented by other programs and departments at Teachers College and Columbia University. With the help of a faculty advisor, students select courses in their area of specialization, with consideration given to their academic background, work experience, 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 on successful completion of 32 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 32 points and one of the three qualifying papers required for the doctorate. The Ph.D. degree is awarded upon completion of a minimum of 75 points of planned and sequential study and a dissertation; and the Ed.D., upon completion of 90 points and a dissertation.

Master of Arts

This M.A. program is designed to provide proficiency and advanced knowledge in the psychology of organizations. Qual-

ified 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, especially 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, or management development, 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"). The Ed.M. degree ordinarily requires an additional two semesters of preparation beyond the M.A. and includes supervised fieldwork and practice in individual and group counseling. Further information may be found in

bulletins obtainable from the coordinator of the Counseling Psychology programs.

Graduates of the master's program may also 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 weighed against those of all 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 located on pages 226–227.

Master of Arts

The Program curriculum comprises major courses (24 points) consisting of four required core courses, other elective ORLJ courses, and 3 non-ORLJ courses taken for at least 2 points each (for a minimum of 6 points) in fields other than

but related to organizational psychology. These courses must be taken within Teachers College (see Teachers College Catalog, "General Requirements for the M.A. Degree").

Courses available in the Graduate School of Business, Engineering and Applied Sciences, Social Work, General Studies and in other areas of the Columbia University Graduate Facilities may be taken. These 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.

Candidates for the M.A. degree in organizational psychology are expected to complete at least 24 points in their major courses. Courses beyond the minimum 32 credits required for the M.A. degree may be required when a candidate is admitted to the program with recognized deficiencies in undergraduate preparatory work in psychology. These courses may be taken before or during the duration of the program. They may be taken in areas such as statistics, human learning, personality, tests and measurement, or other relevant courses.

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

Regardless of concentration, the following four 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)

Organizational Psychology:

Human Resource Development:

Three recommended courses for this area of concentration:

- ORLJ 5169, Assessing and Facilitating Career Development (2–3)
- ORLJ 5106, Psychological Aspects of Organizations (3)
- ORLJ 5055, Staff Development and Training (3)
- CCPJ 5062, Career Counseling and Development (2–3)

Organizational Psychology:

Organizational Change and Consultation:

Three recommended courses for this area of concentration

- ORLJ 5014, Organizational Dynamics and Theory (3)
- ORLJ 5106, Psychological Aspects of Organizations (3)
- ORLJ 6343, Practicum in Change and Consultation in Organizations (4)

Organizational Psychology: Conflict Resolution

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, Part I (3)
- ORLJ 6350, Advanced Practicum in Conflict Resolution and Mediation, Part II: Designing Conflict Management Systems (3)
- ORLJ 5012, Organizational Internship (2–3)

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, Motivation and Reward Systems (3)
- ORLJ 5015, Executive Selection and Development (3)
- ORLJ 5018, Data-based Interventions (2–3)
- ORLJ 5019, Multi-Rater Feedback (2–3)

Suggested Outside Psychology Organizational Electives

Please consult with an academic advisor.

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 24 points of graduate study have been completed, or later at the discretion of the candidate and the faculty adviser. The exam covers all of the major topic areas in organizational psychology.

Doctor of Philosophy

Students are required to take a minimum of 75 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.

All first-year students are required to participate in three full-year courses: "Pro-seminar in Social-Organizational Psychology," "Research Methods in Social-Organizational Psychology," and "Research Practicum." The pro-seminar in social-organizational psychology involves intensive readings and analysis of theories and related research in both social and organizational psychology; the research methods course combines study and actual experience as students become acquainted with laboratory, survey, and field research; and the research practicum involves the students in the research programs of one or more of the faculty members.

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 consult-

ing. 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.

Statistical Requirements

To obtain a Ph.D., a student must successfully pass HUDM, 4122, Probability and Statistical Inference (unless an equivalent graduate course has been taken); HUDM, 5122 Applied Regression Analysis; and HUDM, 5123 Experimental Design. Additionally, students are required to take HUDM, 6122 and HUDM, 6123 Multivariate Analysis I & II.

Qualifying Paper

All doctoral candidates in social-organizational psychology must submit three qualifying papers to the faculty, including a theoretical or review paper, a research paper, and a policy paper or case study. The primary purposes of the qualifying papers are diagnostic, pedagogical, and evaluative. The qualifying papers are examples of the kind of work students will be doing as social-organizational psychologists, and the qualifying procedure provides an opportunity for the student and the faculty to evaluate and develop the student's skills. Students should consult their advisors regarding the format and content of these papers.

Research Training Certification Examination

Students must pass an examination administered by the Office of Doctoral Studies in research design and analysis.

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.

General Psychology Requirements

Required Courses:

- HUDM 4122, Probability & Statistical Inference (3)
- HUDM 5122, Applied Regression Analysis (3)
- HUDM 5123, Experimental Design (3)
- HUDM 6122, Multivariate Analysis I (3)
- HUDM 6123, Multivariate Analysis II (3)
- ORLJ 5040, Research Methods in Social Psychology (3)
- ORLJ 5041, Research Methods in Social Psychology (3)
- ORLJ 5540, Proseminar in Social Psychology (3)
- ORLJ 5541, Proseminar in Social Psychology: Organizational Perspectives (3)
- ORLJ 5014, Organizational Dynamics & Theory (3)
- ORLJ 6040, Fundamentals of Cooperation, Conflict Resolution & Mediation in Different Institutional Contexts (3)
- ORLJ 6343, Practicum in Change and Consultation in Organizations (4)
- ORLJ 6640, Social Psychology Colloquium (0-1)
- ORLJ 7501, Dissertation Seminar (see continuous registration requirement)

Workgroups (required):

- ORLJ 6344-6349
- ORLJ 6344. Coleman (3)
 - ORLJ 6345. Perry (3)
 - ORLJ 6346. Westaby (3)
 - ORLJ 6347. Block (3)
 - ORLJ 6348. Burke (3)
 - ORLJ 6349. Noumair (3)

Note:

1. At least one work group per semester for a minimum of eight semesters overall.
2. At least two different work groups over the eight semesters. Membership means active participation in design and conduct of research until it makes a conclusion. Being present at meetings does not satisfy the requirement.

3. Work group points may not be substituted for required courses listed on the next page.
4. For one of these 8 semesters students with supervision may serve as group facilitators in ORLJ 6343.

Additional Courses in the Program
A total of 26 points must be taken by Social-Organizational Psychology students from among the list of courses below.

Exemptions from any courses require the approval of the faculty member teaching the course.

- ORL 5000/MST 5000, Methods of inquiry: Ethnography and participant observation (3)
- ORL 5362/CCPJ 5362, Group Dynamics: A Systems Perspective (4)
- ORLJ 6045, Demography in Organizations (3)
- ORLJ 5005, Leadership and Supervision (3)
- ORLJ 5017, Small Group Intervention: Theory & Method (2–3)
- ORLJ 5340, Practicum in Conflict Resolution (4)
- ORLJ 6244, Fieldwork in Organizational Consulting (3)
- ORLD 5055, Staff Development and Training (3)
- ORLD 5061, Advanced Staff Development and Training (3)
- CCPX 4137, Group Dynamics: Theory & Experience (3)
- G 4670, Theories in Social and Personality (3)

General Psychology Requirement
In order to meet the requirement of breadth of training in psychology, students must select at least one course from three of the following five areas (I, II, III, V, VI) for a total of three courses in separate areas. (See below). Area IV is covered within the Social-Organizational Psychology Program core courses and serves as the fourth and final area for breadth of coverage in psychology.

Students who intend to seek licensing or accreditation are advised to use one course from each of the Categories I, II or III, and VI below to meet the general psychology requirement. This means that although such courses as HUDM 5059 Psychological Measurement (Category V) are included in the list of courses usable for the general psychology requirement, they should not be used for the requirement by students intending to seek licensure.

Area IV is covered within the Social-Organizational Psychology Program core courses and serves as the fourth and final area for breadth of coverage of psychology.

Satisfactory performance in the four courses selected to fulfill the general psychology requirement is defined as an overall grade point average of B+ and no courses in which the grade earned is less than a B. Students will be permitted to compensate for a grade lower than B by completing another course in the same category as that in which the low grade was earned. Students who because of program requirements take more than four courses are required to maintain a B+ average in only four of them.

Exemptions from the requirements that students take at least one course from each of the four designated categories are possible. However, students must receive permission in writing from a faculty member authorized by the Executive Committee of the Department of Organization and Leadership to grant such exemptions. Students seeking exemption from the requirements on the grounds that they have already completed equivalent graduate courses at Teachers College and elsewhere must provide the designated faculty member with a

detailed description of the presumed equivalent courses, including course title, topics covered in the course(s), text books used, and grade received. Exemptions will be granted only when there is clear evidence of substitutionability.

Faculty members authorized to grant exemptions are:

- I. Learning and Cognition: Professor James Corter
- II. Development: Professor Herbert Ginsburg
- III. Personality: Professor Barry Farber
- IV. Social Bases of Behavior: Professor Caryn Block
- V. Measurement: Professor Jane Monroe
- VI. Biological Bases of Behavior: Professor Antoinette Gentile

Approved General Psychology Courses

The following general psychology courses have been approved:

Learning and Cognition

- HUDK 4029, Theories of human cognition and learning (3)
- HUDK 5090, The psychology of language and reading (3)
- HUDK 5096, The psychology of memory (3)
- G 4001, Cognition (3) (Psychology Department, Columbia University)
- G 4002, Study of learning (3) (Psychology Department, Columbia University)

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 (3)

Personality

- CCPX 5032, Personality and psychopathology (3)
- CCPX 5034, Developmental psychopathology (3)

- G 4003, Personality (3) (Psychology Department, Columbia University)

Social Bases of Behavior

- ORLJ 5540, Proseminar in social psychology (3)
- G 4006, Social psychology (3) (Psychology Department, Columbia University)

Measurement

- HUDM 5059, Psychological Measurement

Biological Bases of Behavior

- HBSK 4075, Brain and behavior (3)
- HBSK 5068, Introduction to neuropsychology (3)*
- HBSK 5070, Neural bases of language and cognitive development (3)
- G 4004, Physiological psychology (3) (Department of Psychology, Columbia University)

*Primarily for students with an above average interest in neuropsychology and who intend or are required to take further courses in this area. HBSK 4075 (Brain and Behavior) is a more general course and is usually offered in the summer term.

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.

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 non-majors with appropriate backgrounds; 6000-level courses are usually limited to majors with advanced standing in the program. See listings below for prerequisites and limitations on enrollment. In addition to the courses listed below, students should consult the

offerings of other psychology programs in Teachers College, many of which are required or recommended in the various program guides which are obtainable from the program coordinators.

Social-Organizational Psychology

ORLJ 4002. Functions of organizations (3)

Mr. Buckner. 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)

Professor Block. 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-ORLJ 5015. Topics in organizational psychology

An overview of principles and methods of diagnosis and intervention in interpersonal, intergroup, and interethnic conflicts in schools and other organizations. Topics are announced in the preliminary and final course schedules distributed each semester.

ORLJ 5012. Organizational internship (2-3) Faculty.

ORLJ 5013. Motivation and Reward Systems (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)

Professor 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 5015. Executive selection and management (2-3)

Faculty. Offered Summer only. Seminar to explore issues in and methods for executive selection and development.

ORLJ 5016. Special topics in Social-Organizational Psychology: Advanced Functions of Organizations (2-3)

Mr. Buckner. An advanced survey of the primary functions and operations of organizations, and the relation of these functions to human resource management. Topics are announced in the preliminary and final course schedules distributed each semester. Registration not limited to one term.

ORLJ 5017. Small group intervention: Theory and method (2-3)

Professor Noumair. Permission required. Prerequisite: ORL 5362 or 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. Multirator feedback (3)

Drs. Church and Waclawski. Permission required. This course focuses on the theory, research, and application of three primary data-driven interventions for I/O psychology and OD-related interventions and initiatives: large scale assessment surveys; multirator (a.k.a. 360 degree) feedback methods; and interviews and focus groups. Course format combines lecture, case study, and group project work.

ORLJ 5020. Special topics in Social-Organizational Psychology: Advanced Functions of Organizations (1-3)

Faculty. New and emerging developments, practices, and concerns in the fields of social and organizational psychology are examined and evaluated. Schedules distributed each semester. Registration not limited to one term.

ORLJ 5040-ORLJ 5041.

Research methods in social psychology (3)

Professor Block (Fall) and Faculty (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 5340. Basic Practicum in conflict resolution (4)

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 (4)

Professor Noumair. Permission required. 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: \$75.

ORLJ 5540-ORLJ 5541. Proseminar in social and organizational psychology (3)

Faculty (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 6042. Applications of social and organizational research (3)

Faculty. Permission required. Background in research methods required. Examination of social psychological aspects of selected policy experiments in schools, the arts, social welfare, family planning, and criminal justice.

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)

Professor Burke. 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. Enrollment limited. Recommended prerequisites: ORL 5362 or CCPJ 5362. 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.

ORLJ 6344-ORLJ 6349.

Research practicum in social-organizational psychology
Permission required. Limited to doctoral students. Topics are announced in the preliminary and final course schedules distributed each semester.

- ORLJ 6344. **Conflict, justice, and cooperation (3)**
Professor Coleman.
- ORLJ 6345. **Diversity and discrimination in organizations (3)**
Professor Perry.
- ORLJ 6346. **Organizational attitudes, job search, and career development(3)**
Professor Westaby.
- ORLJ 6347. **Motivational issues in organizations (3)**
Professor Block.

- ORLJ 6348. **Psychology of managerial and leadership competence and multirater feedback (3)**
Professor Burke.

- ORLJ 6349. **Group/organizational dynamics and diversity issues in organizations (3)**
Professor Noumair.

ORLJ 6350. Part I: Advanced practicum in conflict resolution (Part I) (3)

ICCCR Staff. Prerequisites: ORLJ 5340 and ORLJ 6040. Limited enrollment. Students will engage in negotiation and mediation involving persons from different cultural contexts as well as with “difficult” cases.

ORLJ 6350. Part II: Advanced practicum in conflict resolution: Designing conflict management systems (3)

ICCCR Staff. Prerequisite: ORLJ 5340. 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 (0-1)

Faculty. Permission required. For doctoral candidates only. Discussion of ongoing projects involving research and consultation.

ORLJ 7501. Dissertation seminar (1-3)

Faculty. Permission required. Development of doctoral dissertations and presentation of plans for approval. Registration limited to two terms. For requirements, see section on Continuous Registration for Ed.D./Ph.D. degrees.

Independent Study and Research

Students may register for intensive individual study of a topic of special interest. Registration in independent study is by permission of the instructor under whose guidance the work will be undertaken.

Credit may range from 1 to 3 points each term except for ORLJ 8900 (Dissertation Advisement) and registration is not limited to one term. Hours for individual conferences are to be arranged.

ORLJ 4901. Research and independent study in social-organizational psychology (1-3 each course)

ORLJ 6901. Advanced research and independent study in social-organizational psychology (1-3 each course)

ORLJ 8900. Dissertation advisement in social-organizational psychology (0 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-matriculated students for credit or noncredit 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 4 courses and two semesters of internships.

The sequence of courses leading to the Certificate of Attendance in Conflict Resolution is:

- ORLJ 5340: Basic Practicum in Conflict Resolution and Mediation
- ORLJ 6040: Fundamentals of Cooperation, Conflict Resolution, and Mediation in Different Institutional Contexts
- ORLJ 6350, 001: Advanced Practicum in Conflict Resolution, Part I
- ORLJ 6350, 002: Advanced Practicum in Conflict Resolution, Part II—Designing Conflict Management Systems

For the internships, there are currently 5 possibilities (ORLJ 5012):

- Community Mediation
- Early Childhood Conflict Resolution
- Divorce Mediation
- 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

ORLJ5340: Basic practicum in conflict resolution and mediation

ORLJ6019: Labor management in education

ORLJ 6040: Fundamentals of cooperation, Conflict Resolution, and Mediation in Different Institutional Settings

ORLJ 6350, 001: Advanced Practicum in Conflict Resolution, Part I

ORLJ 6350, 002: Advanced practicum in conflict resolution, Part 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.

Educational Policy

Program Committee:

- Professor Jeanne Brooks-Gunn (Developmental Psychology),
- Professor Dale Mann (Educational Administration),
- Professor Gary Natriello (Sociology and Education),
- Professor Craig Richards (Educational Administration)

Educational Policy Coordinator:
Connie Bond
212-678-3391

The concentration in Educational Policy is open to students from all departments who wish to complement their disciplinary studies with an examination of issues in educational policy. Through coursework, seminars and internship opportunities, Teachers College students can examine the politics of social and educational change, how policies should be evaluated, and how climates of supports for policies are created. Policy concentration students are required to take 12 points in specific policy related courses, including a two semester seminar focused on policy analysis and implementation. The remaining 6 points are allotted to HUDF4000-Education and Public Policy, and a 3 point methods course to be chosen with their advisor. Students are also expected to participate in a field-based internship that relates to their policy concentration. Possible internship placements include educational consulting companies, child advocacy agencies, city and state government offices, school districts and non-profit organizations. (Note: the internship may be part-time or over the summer to allow flexibility for students who work. Students with extensive previous policy experience may seek exemption from the internship).

In addition to the specific concentration requirements listed above, students are also strongly encouraged to take additional courses in policy specific to their degree program. These courses are offered both by Program Committee members and the “Faculty in Policy”, a larger group of professors from a broad range of departments, all of whom conduct classes with a policy focus. The majority of these courses are housed in the programs in Curriculum and Teaching, Developmental Psychology, Economics and Education, Educational Administration, Health Education, History of Education, Philosophy and Education, Politics and Education, Sociology and Education, Special Education, and a number of other programs.

The following courses are examples of the many policy-related classes available to Teachers College students. For a more comprehensive list, consult the separate departmental course listings or contact the Educational Policy Coordinator. ORLA 4040. Education Policy Decision Making
ORLA 4046. School Finance: Policy and Practice
HBSE 6004. Public Policy/Administration-Special Education
HUDF 5042. Urban Politics and Education
HUDK 5036. Child and Adolescent Development and Social Policy
HBSS 4112. Social Policy and Prevention
C&T 4651. Young Children and Social Policy: Issues and Problems
C&T 5074. Curriculum and Teaching Policy

Please consult the departmental listings for complete course descriptions.

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, health-care and social service agencies, the media, libraries and museums, and religious institutions. Values, attitudes, norms, self-concepts, and expectations are formed, sustained, and modified in families as different generations teach and learn from each other through observation, participation, and instruction.

Families also mediate and thereby transform the influences of other educational institutions on their members. 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 Herve Varenne
 Professor Jeanne Brooks-Gunn
 Professor Victoria J. Marsick
 Professor Dale Mann
 Professor Celia Genishi
 Professor Jo Anne Kleifgen
 Professor Barbara C. Wallace

Law and Educational Institutions

Advisor: Professor Jay P. Heubert

Law and lawyers are not merely nuisances to which educators, policy makers, parents, and communities can react passively or defensively. 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. Moreover, 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 schools and colleges: church-state-education; race-state-education; cademic freedom; equality of educational

opportunity; curricular rules; conduct rules; punishments; due process for students; negligence; defamation; records. This course and ORLA 5087 or 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). This course and ORLA 4086 form a two-semester sequence. Enrollment is for one or both (in either order but not concurrent). Materials fee: \$15.

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.

For information about the program coordinated with the School of Law for students admitted there, contact Professor Heubert.

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 edu-

cation, 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

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.

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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 application. If

the degree or certificate is not then earned, a Renewal-of-Application is to be filed for reconsideration of the award. (See Academic Calendar for dates.) An application for award terminates at the next time for degree conferral but may be renewed upon filing a Renewal-of-Application with the \$15 renewal fee in accordance with the dates listed in the Academic Calendar. Degree applications are kept on file for a period of three years from the date of the original degree application.

Graduation

All degrees and certificates are awarded in October, February and May. Degrees are conferred by the President of the University at the annual commencement in May.

Master of Arts

Point Requirement

The Master of Arts degree is granted upon the satisfactory completion of no less than 30 points and a formal essay; or 32 points and an acceptable departmental integrative project; or 32 points and successful completion of a departmental comprehensive examination. At least 20 points must be earned in Teachers College courses. The remaining course work, through Teachers College registration, may be completed in Teachers College or other graduate divisions of the University, but no more than 12 points of graduate credit from other faculties of the University will be credited toward the minimum point requirement. Graduate level courses in the University are numbered from 4000 and above.

A candidate for a second Master's degree must be readmitted to candidacy by the Office of Admission. Courses and the integrative project, comprehensive

examination, or essay offered for the first Master's degree may not be applied toward the second. The same minimum point requirements stated above apply, 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.

Essay

Students opting for the preparation of a formal essay should check with the Office of the Registrar for instructions. The formal essay must demonstrate the ability of the student to select, organize, and present the results of professional investigation in the major field. The essay may consist of a body of work in a studio or performance area, demonstrating the design, preparation, and presentation of professional works appropriate to the major field. Documentation of such works may include media such as photographs, color slides, TV tapes, film, recordings, or an approved computer software program. An outline of the subject of the essay must be

approved by the major advisor and forwarded to the Registrar prior to or accompanying the application for the degree. The original copy of the formal essay is to be submitted to the Registrar no later than the dates indicated in the Academic Calendar. The approved essay is submitted to the College library for retention; the departmental integrative project is maintained in the major department.

Master of Arts in Teaching

The Master of Arts in Teaching, a Columbia University degree, for students from Columbia, Barnard, or the School of General Studies, is offered as an alternative to the Teachers College Master of Arts degree for prospective secondary school teachers of English, Spanish, mathematics, science, and social studies. For the current year, applications to this program are not accepted.

Master of Science

The Master of Science degree is granted upon the satisfactory completion of a minimum of 30 points and a formal essay; or 32 points plus a departmental integrative special project; or 32 points and successful completion of a departmental comprehensive examination. At least 20 points must be earned in Teachers College courses. The remaining course work may be completed, under Teachers College registration, in Teachers College or in other graduate departments of the University. Graduate level courses in the University are numbered from 4000 and above.

Program of Study

The program for the Master of Science degree must include at least 20 points in science courses and related technical fields. In order to broaden the student's background in education, a minimum of two 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); and 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 departmental com-

prehensive 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 program 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.

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.

Doctor of Philosophy

The degree of Doctor of Philosophy emphasizes research and intensive specialization in a field of scholarship. Under an Agreement with Columbia University, Teachers College offers programs leading to the Ph.D. degree in designated fields in which the Graduate School of Arts and Sciences of the University does not offer programs, namely in education, including education in the substantive disciplines and certain applied areas of psychology. The minimum requirements for the degree are: satisfactory completion of a planned program of 75 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 regis-

ter 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.

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 have not been in attendance during the past five years are to update their records in the Admission Office well before the registration dates. An application for readmission may be obtained from the Admission Office. 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 in person or, for continuing students, by use of Teachers College Touchtone (see below). Doctoral students at the stage of continuous dissertation advisement may register via Touchtone services.

Teachers College Touchtone Services

Continuing students who have consulted with their faculty advisors may register by telephone. It is each student's responsibility to obtain advisor approval, and to obtain consent from the course instructor for any course listed in the Schedule of Classes that requires approval prior to registration. Special approvals for classes must be entered into the Banner computer system by the department offering the course before students can register via Touchtone services. Use of the telephone registration system requires a Personal Identification Number [PIN]; registered students who did not receive or have misplaced theirs may obtain a PIN by presenting photo identification to the Registrar's Office [148 Horace Mann]. For security reasons, PIN numbers are not available through FAX or over the telephone. During registration

periods, this system is normally available Mondays–Saturdays from 8 a.m. to 11 p.m. The telephone number to access this system is (212) 678-3200.

Whenever course enrollment has been entered on the computer registration system, the student is responsible for payment of the assessed charges unless the student files a Change-of-Registration form or submits a letter to the Registrar requesting withdrawal, in accordance with the dates listed in the Academic Calendar. See section on changes in registration, withdrawals and refunds.

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 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 which 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 semester 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 semester points per term. Students enrolled for fewer than 12 semester points (0–11 semester points) are considered "part-time." "Half-time" status is based on enrollment of 6–11 semester points per term. Students registered for fewer than 6 semester points are accorded "less-than-half-time status." During the Summer Term, enrollment status is determined by the cumulative number of semester points in both Session A and B. For "full-time" status, students must register for a combined load of at least 12 semester points, with no more than 9 semester points in one summer session.

Students taking fewer than 12 semester points in a term may be certified as full-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. Students may request that copies of an approved COE form be sent to any office requiring certificates of enrollment (for example, Office of Student Aid or the Housing Office).

No student will be certified for full-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 change of points in variable point courses, or of total withdrawal from the College, must be given to the Registrar in writing or by use of the Teachers College Touchtone Telephone Registration System on or prior to the deadlines published in this Catalog. (See the Academic Calendar.)

Changes in registration may be made until Tuesday, September 15 for the Autumn term; and Monday, February 1 for the Spring term. After these deadlines, courses may not be added but a partial refund of tuition fees for withdrawal from courses may be authorized by the Registrar. (See Withdrawal from courses with tuition refund.)

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.

Reduction of charges will be calculated from the day the Registrar receives written notice from the student. The College reserves the right to retain fees of students withdrawing from classes with limited enrollment.

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 on or after September 15 for Autumn and February 1 for Spring.

TUITION AND FEES

Tuition and fee rates are set annually by the Board of Trustees. Beginning in fall for the 2000–2001 academic year, tuition for all regular courses is \$705 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 individual school or the College's 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 to the right 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, 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 Touch-tone 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 the Touch-tone service. 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 5:00pm.

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, fees, and term housing charges less any aid disbursed, over three equal installments during the semester. An agreement between the student and Teachers College must be completed with a representative of the Office of Student Accounts no later than **(September 8, 2000)** for the fall semester and **(January 19, 2001)** 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:

Other Fees

| | |
|---|--|
| Teachers College Fee | \$170 |
| Teachers College Research Fee | \$170 |
| Health Service Fee | \$224/\$224 |
| Medical Insurance Fee | (Basic) \$334/\$511 (Comprehensive) \$465/\$714 |
| 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 | \$2115 |
| Ph.D. Oral Defense fee | \$3150 |
| Late registration fee | \$100 |
| Late application fee for conferring of degrees | \$15 |
| Special examination fee (each course) | \$25 |
| Student identification card replacement fee | \$5 |
| Late payment fee (flat fee) | \$50 |
| (monthly fee) | 1-1/3% (16% annually) |
| Returned check fee | \$20 |
| Deferred payment plan fee | \$50 |

Fees listed here and elsewhere throughout this catalog are reviewed periodically and are subject to change without prior notice. Additional fees may be added. Spring medical insurance runs through August 31.

Fall Semester

| |
|---|
| First Payment on or before (Sept. 8, 2000) |
| Second Payment October 2, 2000 |
| Third Payment November 2, 2000 |

Spring Semester

| |
|---|
| First Payment on or before (Jan. 19, 2001) |
| Second Payment February 9, 2001 |
| Third Payment March 9, 2001 |

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 and are accepted throughout the semester, however, to avoid a late payment penalty, tuition exemption forms and any additional payments are due by the last day of in-person registration. If a student registers late, payment including tuition exemption is due at the time of the late registration. Various fees including, but not limited to, course fees, college fees, health service fees, medical insurance, and late registration fees are not covered by tuition exemption. The student should be prepared to remit payment for these fees.

Third Party Agreements—Students enrolling under a third party agreement must submit an authorization form to the College for approval. A third party is usually an outside agency (not an individual) that agrees to pay all or part of the charges incurred by a particular student. The authoriza-

tion 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. Late application filing and anticipated student aid does not constitute a deferment. 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 two late payment penalties. An initial **Late Payment Fee of \$50** will be charged on any outstanding balance during the first billing period, and 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 met.

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 2000

| <i>Week ending</i> | <i>Percent of refund</i> |
|--------------------|--------------------------|
| September 8 | 100% |
| September 15 | 100% |
| September 22 | 80% |
| September 29 | 75% |
| October 6 | 70% |
| October 13 | 65% |
| October 20 | 55% |
| October 27 | 50% |
| October 31 | 40% |
| after October 31 | 0% |

Spring 2001

| <i>Week ending</i> | <i>Percent of refund</i> |
|--------------------|--------------------------|
| January 19 | 100% |
| January 26 | 100% |
| February 2 | 80% |
| February 9 | 75% |
| February 16 | 70% |
| February 23 | 65% |
| March 2 | 55% |
| March 9 | 50% |
| March 16 | 40% |
| after March 16 | 0% |

Only Teachers College charges are subject to this reduction.

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 be sure the Registrar has the 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.

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.

Grades are defined as follows:

A+ Rare performance.
Reserved for highly exceptional, rare achievement.

A Excellent. Outstanding achievement.

A- Excellent work, but not quite outstanding.

B+ Very good. Solid achievement expected of most graduate students.

B Good. Acceptable achievement.

B- Acceptable achievement, but below what is generally expected of graduate students.

C+ Fair achievement, above minimally acceptable level.

C Fair achievement, but only minimally acceptable.

C- Very low performance. The records of students receiving such grades are subject to review. The result of this review could be denial of permission to register for further study at Teachers College. No more than 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.

F Failure. The records of students receiving such grades are subject to review. The result of this review could be denial of permission to register for further study at Teachers College. A course usually may not be repeated unless it is a required course. When the course is required, the student will reregister and obtain a

satisfactory grade. The previous grade remains on the transcript.

P Passed. Some courses are graded only on a pass/fail basis for the instances in which greater evaluation specificity is neither required nor desirable and is used to indicate passing performances when only dichotomous evaluation is used. At no time will the transcript carry any other grade nor will supplementary statements be issued. Application for the Pass/Fail option is to be made during the first three class sessions with the approval of the course instructor. Applications are available in the Office of the Registrar, 148 Horace Mann. Once the option is approved, it may not be changed.

DP Doctoral pass credit. The grade of DP may be assigned only to a certified doctoral candidate in a Teachers College course, having successfully completed all requirements prescribed by the instructor. The candidate must request DP credit before two-thirds of the class sessions have met. Eligibility is determined upon presentation of the doctoral identification card, and a record of the request for a DP grade is made by completing a form obtainable from the Office of the Registrar. DP credit is available to doctoral students only in terms subsequent to the terms in which the student is certified. DP credit may not be used toward M.A. or M.S. degree requirements. A maximum of 6 points of DP credit may be used toward Ed.M. degree requirements.

WD Withdrawn. Withdrawal occurring subsequent to the close of the change-of-program period during the term. See 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 Science 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 provided 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 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.

Residence Life at Teachers College

The Office of Housing and Residence Life at Teachers College strives to create a multicultural campus community that supports students in their academic endeavors and personal growth. The residence halls bring together graduate students from all over the world in an environment that provides a unique opportunity to establish new friendships, explore other world views, and take advantage of all that New York City offers. Living close to the campus affords students easy access to the library, classrooms, gymnasium, and other Columbia University facilities. Students may choose to take advantage of a wide range of planned residence hall activities, club meetings, departmental lectures, and musical and dance events.

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. Because of the high demand for student housing, five years is the maximum amount of time that a student may remain in the Teachers College residence halls. The Office of Housing and Residence Life accepts applications up to a year before a student plans to begin studying at Teachers College.

Eligibility for Student Housing

To be eligible for housing, students must be enrolled in a degree program and registered to take classes at Teachers College. To maintain eligibility, residents must complete a minimum of 24 credits (or have full-time equivalent) during

each 12 month period beginning with the fall semester (12 credits during the spring semester for students beginning residency that semester). Residents who complete said credits may remain in the halls through the summer provided they have not yet completed degree requirements and will be enrolled for the fall semester.

When to Apply for Housing

Housing offers are based on availability of rooms/apartments, geographic priority, and the date of receipt of the housing application. Applicants who live more than 50 miles outside of New York City have the highest priority.

The Office of Housing and Residence Life recommends the following timeline for submitting an application:*

For Fall term entry:

February 1

For Spring term entry:

September 1

For Summer A term entry:

December 1

For Summer B term entry:

January 1

***Please Note: The application process for housing is separate from the admission process. Your housing application will be delayed if it is not sent directly to the Office of Housing and Residence Life. Housing applications are accepted before admission decisions are made. Because the demand for housing is so great, housing is not guaranteed. Applicants are, therefore, strongly encouraged to apply early.**

Notification of Housing Offers

The Office of Housing and Residence Life will notify students of their housing assignment prior to the semester for which a student plans to enroll. Typically, offers are made in April for the summer term, in June for the fall term, and in November for the spring term. The notification of availability of space is accompanied by a housing contract which must be returned with a \$500 non-refundable security deposit. This deposit is not used as rent, but, rather is held in an interest-bearing account for the duration of the student's residence.

Housing Assignments

Housing assignments to a particular room/apartment are made based on space availability and the received date a student's housing application. Every effort is made to try and accommodate each applicant's housing preferences. There is a transfer period after the semester begins. Students may choose to exercise the transfer option if the College was unable to accommodate the original request.

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 price, the mailing address, and the telephone number. Also, information regarding check-dates and times will be enclosed.

Single Student Housing Options

There are two buildings currently available to house single students—Greystone Residential Hotel and Whittier Hall.

The Greystone Residential Hotel is located on the upper West Side of Manhattan at 212 West 91st Street and Broad-

way. Teachers College leases 100 rooms or about 20% of the fifteen floor building. The remainder of the building is leased by other colleges and long-term private occupants. There is a front desk and evening security is provided. Each room is a self-contained unit with private bath and limited cooking facilities (more complete cooking facilities are located in the student lounge, which is furnished with microwaves, a full-size oven, and dining tables; in the adjacent room is a TV lounge). All rooms are fully furnished with a bed, desk, dresser, larger closet, desk chair, lounge chair, and small dining table with two chairs. The average size of each apartment is 11.5 x 19 feet. Maid and linen service is available once a week free of charge. The telephone in each room is connected to the central switchboard to accept calls. Pets are not permitted. The building is located near an express subway stop and Broadway bus line. It is approximately a 30 minute walk or a 15 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 the building. All assignments offer a private bedroom. Room sizes vary in all accommodation types. In the single rooms, kitchen and bathroom facilities are shared by approximately 20 students. Suite areas have kitchen and bath facilities shared by three to six individuals. Efficiency units, one bedrooms, and studio units all have private bath and kitchen facilities. All student housing is partially furnished with a bed, desk, desk chair, overhead light, easy chair, mirror, chest of drawers and/or wardrobe. The efficiency, one

and two bedroom, and studio units have a private kitchen, with a kitchen table and chairs provided. Students must provide their own linens, towels, cooking utensils, clothes hangers and other household items. Microwaves are provided for students in suites, efficiencies, studios and one bedrooms. Combination microwave and refrigerator units are provided in the single rooms. Telephone with voice mail, cable tv service, and computer data service are also included in each room.

Single Student Housing Rates

| Academic Year | Average Semester |
|---------------|------------------|
| 2000-2001 | Rate Range |

Greystone Residential Hotel

Efficiencies \$3650

Whittier Hall

Single rooms \$2420

Suite rooms \$2760

Efficiencies \$3825*

Shared

Two-bedroom

Apartment \$3375*

One-bedroom

Apartment \$4995*

Studio \$5015*

*There are limited numbers of these units available.

Family Housing Options

Teachers College also offers three residence halls for student family housing: Bancroft, Grant, and Sarasota Halls. These buildings provide one bedroom apartments, two bedroom apartments and three bedroom apartments. One bedroom apartments are assigned to families with one child or none. Depending upon availability, two bedroom and three bedroom apartments are assigned to families with two or more children. All family housing apartments are furnished with a double bed, dresser, mirror, desk, bookshelf, one straight chair, dining table

and chairs, two easy chairs, and one floor lamp. Residents may request for furniture to be removed from the apartment if they wish to bring their own. Window curtains, blankets, pillows, linens, kitchen utensils, dishes, rugs, and extra lamps must be provided by the residents.

Grant and Sarasota Halls at 512 and 514 West 122nd Street, respectively, are each 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 back apartments have a long hallway with the bedroom, kitchen, bath, and living room opening off the hallway.

Bancroft Hall is an eight story residence with 108 apartments. Each unit has a bath, kitchenette, and bedroom(s). The front apartments face 121st Street and are slightly larger. Back apartments face a large courtyard which joins Bancroft to Grant and Sarasota. A desk clerk is on duty 24 hours a day in Bancroft Hall. The desk clerk at Bancroft Hall monitors the entrances of Grant and Sarasota via closed-circuit television.

Family Housing Rates

| Academic Year | Average Semester |
|---------------|------------------|
| 2000-2001 | Rate Range |

Bancroft, Grant, and Sarasota Halls

One-bedroom Apartments \$5375

Two-bedroom Apartments \$5620

Three-bedroom Apartments \$6400

(only two are available)

Semester rents vary according to the size and location of the apartment. Residents pay their own monthly phone bill and electric charges. Utility service

provided in the semester rent include: heat, gas, telephone service with voice mail and cable tv.

Family Housing Policy

Teachers College accepts family housing applications from and offers assignments to, traditional and non-traditional families, both with or without children. For the purposes of this policy, however, the Office of Housing and Residence Life defines traditional family to be two spouses, both of whom will be in residence (with or without children) or a single parent with one or more dependent minors in residence. A non-traditional family is defined to be two adult domestic partners (with or without children in residence) who present evidence, described below, of a long-term relationship with each other characterized by an emotional and financial commitment and interdependence.

Resident of Record

Family housing assignments are made solely to the resident of record. This is the person who is defined as the principle Teachers College student member of the family at the time of housing assignment. The apartment assignment and agreement will be in the name of the resident of record. It is the obligation of the resident of record to pay the security deposit and all residence hall charges. The College will look solely to the resident of record to fulfill the obligation. No relief from this obligation will be available to the student if his or her status in the family changes during the term of the assignment. Each student who applies for family housing is obligated to inform the Office of Housing and Residence Life in writing of any change in the student's family status that occurs after the application is made and before the expiration

of the assignment. If as a result this change of status, the student or the other family member is no longer eligible to remain in family housing, he or she is obligated to vacate the premises at the written request of the Associate Director of Housing by the end of the Semester or thirty days, whichever is earlier date. If the remaining family member is eligible for single student housing, the Office of Housing and Residence Life will attempt to accommodate the student. However, neither the Office of Housing and Residence Life nor Teachers College are under any obligation to provide single student housing for persons whose family housing assignment has been terminated.

Requirements for Residence Hall Family Housing

Applicants must demonstrate that both the applying student and the individual(s) with whom the space is to be shared constitute a family in order to be eligible for family housing. Qualifying family relationships under this policy are those relationships evidenced by marriage; the presence of minor, dependent children; or evidence of a domestic partnership, i.e., a long-term relationship between the two adult domestic partners characterized by an emotional and financial commitment and interdependence. Qualifying family relationships do not include a relationship with parents, grandparents or siblings, other than a minor sibling for whom an adult member of the family is the legal guardian. Qualifying families without children are eligible only for one bedroom apartments.

Evidence of Family Status

In determining whether the applicants constitute a qualifying family relationship, the following shall be acceptable evidence of such a relationship:

- a) **In the case of marriage,** a current certificate of marriage.
- b) In the case of a single parent with one or more dependents, a birth certificate, adoption papers, or other appropriate documentation of legal guardianship.
- c) In the case of two adult domestic partners, the attached affidavit form must be notarized. Also, one of the following must be included with the housing application:
 1. A joint lease naming and signed by both applicants and their landlord indicating that the applicants have shared the stipulated premises as their primary residence for a minimum of one calendar year immediately prior to their application. In the event the applicants are owners of their property instead of apartment renters, the appropriate deed of joint ownership, naming both parties, and evidence that these premises were their primary residence for the one calendar year immediately preceding their application can be substituted; or
 2. Joint tax returns for one calendar year immediately preceding the application; or
 3. A notarized letter on bank letterhead signed by a bank officer indicating that the named applicants have had a joint saving and/or checking account at the bank for the last calendar year; or

4. An Affidavit of Domestic Partnership from New York City or any city which registers unmarried couples who are in a committed, on-going family relationship.

Please contact the Office of Housing and Residence Life with any questions about eligibility for domestic partnership.

Important Things to Consider about the Residence Halls Application

- The attached application is for continued Teachers College housing. If you want summer, conference, or guest housing, please contact the Office of Housing and Residence Life at (212) 678-3235.
- The Teachers College housing application will not be considered unless it is filled out completely. Applicants for family housing must submit one of the following appropriate forms of documentation: (a) marriage certificate; (b) birth certificate or adoption/guardianship papers; (c) domestic partnership affidavit which has been notarized and one additional supporting document selected from the options presented in the Family Housing Policy section.
- Please send the housing application along with the \$20 non-refundable application fee to the Office of Housing and Residence Life as soon as possible. Make the \$20 application fee payable to Teachers College. Applications will not be processed unless the \$20 fee is remitted.
- Please remember that offers for housing will not be made until you are officially admitted to Teachers College in a degree program, and have met all Admission requirements. The Office of Housing and Residence Life encourages you to complete your admis-

sion application as soon as possible so this does not delay your housing assignment. You may submit an application for housing even if you have not yet been admitted to a degree program.

- It is your responsibility to notify the Admissions Office of any subsequent changes in address or phone number. Any misinformation given will void the application and cancel any housing assignment made.
- Housing applications are only considered for the initial semester for which you apply. If you must defer your application, you will need to notify the Office of Housing and Residence Life in writing. Your application will then be considered for the requested semester. The housing application can only be deferred up to one year.
- If you have any questions regarding housing, please feel free to contact the Office of Housing and Residence Life by telephone at (212) 678-3235, or by fax at (212) 678-3222. The Office of Housing and Residence Life is located on the first floor of Whittier Hall, which is next to the bookstore.

Our mailing address is:

Office of Housing and
Residence Life
Box 312
525 West 120th Street
New York, NY 10027

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 non-degree 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).
2. 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 made payable to Teachers College in the following amounts:
 - \$50 New applicants
 - \$25 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 99–100, 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.

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.

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.

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 non-standard 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 *relevé 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 certi-

fied 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 Susanne Nanka-Bruce, 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 \$50 nonrefundable application fee. There are no deadlines for admission to non-degree status. Applicants may register as a non-degree 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 Services for Students with Disabilities, Teachers College, 525 West 120th Street, Box 42, 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 remove cost as a barrier to attendance through scholarships and need-based programs including grants, loans, and the Federal Work-Study Program. A student must be enrolled at least half-time (6 points or the equivalent) in a degree program in order to receive Federal Aid.

Scholarships and Grants

Each year Teachers College awards over \$5 million of its own funds in scholarship/stipend aid to students and \$2 million of endowed funds to new and continuing students. Most scholarship awards are made solely 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, and academic and living expenses.

General Scholarships

Based upon merit, all students are eligible for Teachers College General Scholarships. Program faculty make the awards decisions.

Minority Student Scholarships

Teachers College Minority Scholarships are available to U.S. citizens and permanent residents 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. Students with disabilities must be registered with the Teachers College Office of Services for Students with Disabilities. The program faculty make the award decisions based upon academic merit.

International Student Scholarships

Teachers College International Student Scholarships are avail-

able to international students only. The award process is competitive. Students are recommended by academic program faculty.

Endowed Scholarships

Endowed scholarships are provided through the generosity of donors' contributions. Many of these are in support of students in particular programs. Faculty select the award recipients based upon the criteria designated by the donor. Some endowed scholarships are available to students across many programs. Faculty nominate students to a College-wide selection committee which makes the final award decisions. There are over 300 endowed scholarships.

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 toward other College and living expenses.

Grants-in-Aid

Grants-in-Aid are awarded primarily to doctoral students during the last two semesters of graduate work, taking both merit and need into consideration. Students must demonstrate considerable loan indebtedness incurred while at Teachers College. International students are required to seek approval from the International Student Advisor. Faculty recommendations in support of Grant-in-Aid applications are required. Applications are available in the Office of Student Aid. A committee makes the awards decisions. Applications must be submitted to the Office of Student Aid for the Fall semester by September 15,

for the Spring semester by February 1.

Departmental Supplemental Scholarships

These scholarships are available to students enrolled in teacher education/certification programs. Students are selected by the program faculty. Awards are made based upon merit.

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 calling the Peace Corps Fellows Program Office at 212.678.4080; by writing to the Program at Box 90, Teachers College, Columbia University, 525 West 120th Street, New York, NY 10027 and/or by visiting the website at www.tc.columbia.edu/pcfellows.

Teacher Opportunity Corps

Teacher Opportunity Corps (TOC) scholarships are available to New York State residents who are African-American, Hispanic, Native American, or Alaskan American. Recipients must also be U.S. citizens or permanent residents. Applicants must be prospective or experienced teachers who are not yet fully certified to teach in the public schools. To be eligible, recipients must enroll at least half-time in one of the following Teachers College programs: Bilingual/Bicultural Education, Elementary Education, Mathematics Education, Movement Sciences, Music Education, Science Education, Social Studies, Special Education,

Teaching of English or Teaching of English to Speakers of Other Languages (TESOL). TOC recipients receive some funding for each academic year of their degree program. A separate application must be made to this program. Additional information and an application can be obtained from the TOC Program Office at (212) 678-3471 or 3466.

Jewish Federation for the Education of Women (JFEW)

A \$15,000 scholarship is awarded to select full-time female students who are enrolling in sciences, math, special education, TESOL, and reading specialist teacher certification programs, and who are willing to teach for three years in the New York City public schools, upon graduation.

Nicholson Family Scholarships

These scholarships provide support to students selected by the Dean and President of the College for outstanding academic merit.

Rose Fellows

This program awards up to 18 points of tuition plus a research fellowship to students who have achieved academic merit in education, psychology or health education.

Teresta Magsaysay and Ken Boxley Scholarships

These scholarships provide a select number of full time students 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.

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 permanent resident 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 financial aid counselor for more information.

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 for and during the semester a student is enrolled.

Teachers College General Loan
Students who demonstrate need and are enrolled at least half-time 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 (formerly NDSL) are awarded on the basis of need from a limited amount of federal funds allocated to Teachers College. Students must demonstrate need and be enrolled at least half-time (6 points or the equivalent). 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. Cancellation and deferment provisions may be available, including cancellation of portions of the loan for teachers in specific areas. Information regarding loan cancellation is available in the Office of Student Accounts.

Federal Subsidized Stafford Loan
Federal Subsidized Stafford Loans (formerly GSL) are need-based and available to students enrolled at least half-time or the equivalent. The FAFSA must be filed to determine financial need. Payment on both interest and principal is deferred, and interest does not accrue until six months after a student graduates, drops to less than half-time, or leaves Teachers College. For borrowers whose first loan was disbursed on or after July 1, 1994, the interest rate is variable, based on the 91-day T-Bill rate plus 3.10%, capped at 8.25%. Repayment may take up to ten years but can be deferred further under some conditions. The maximum amount of subsidized Stafford loan a graduate student may borrow per academic

year is \$8,500. Students may borrow a maximum of \$65,500 during their undergraduate and graduate education. Stafford Loans for an academic year are disbursed in at least two equal payments. A 3% origination fee and an insurance premium up to 1% (which varies with guarantor) are deducted from each disbursement. More information is available from the Office of Student Aid or the student's lender.

Federal Unsubsidized Stafford Loan
Federal Unsubsidized Stafford Loans have the same interest rate, terms and conditions as Federal Subsidized Stafford Loans except that the borrower is responsible for interest that accrues while in school and during other deferment periods. The program is also open to students who may not qualify for the subsidized Stafford loan or who may qualify for only a partial subsidized Stafford loan. The origination fee and insurance premium are the same as the Federal Subsidized Stafford Loan. Depending on need, students may borrow up to \$18,500 per academic year in subsidized and unsubsidized loans combined. Graduate students may borrow an aggregate maximum of \$138,500 in subsidized and unsubsidized loan funds over their undergraduate and graduate education.

Students may opt to take Federal Stafford loans in the form of William D. Ford Federal Direct Loans. The terms and conditions are very similar to the Federal Subsidized and Unsubsidized Stafford loans. Student applying for federal loans will receive a detailed comparison and can seek further guidance from a student aid counselor.

Other Loans

There are several student loan programs administered by private institutions that provide funds to students who do not qualify for Federal or need-based loans or who may need additional funding. They are often available from banks, and require a processing fee, a credit check, and in some cases, a co-signer. Securing a co-signer can result in lower interest on the loan.

Student Employment

Student Employment
Opportunities for student employment are available at Teachers College. Students should inquire at the Teachers College Personnel 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 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 Personnel Office.

Graduate Assistantships

Students who are employed as Graduate Assistants (payroll category 6181) will receive one point of tuition for every \$500 of salary up to a maximum of 3 points per semester, and six points per academic year. Points may be used for the

semester during which a student works as a graduate assistant, or in the semester directly following.

How to Apply for Aid

To receive priority consideration for scholarships, new students must complete their admissions application by January 2nd for doctoral students and January 15th for master's students. Programs 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. Continuing students who wish to be considered for scholarship support must file the scholarship application in this Catalog by February 1st. The application may also be obtained in the Office of Student Aid.

However, because some scholarships do require financial need, it is advisable for all students to file a Free Application for Federal Student Aid (FAFSA). Only continuing and international students should file the Teachers College Student Aid application found in this Catalog.

The Student Aid Application must be returned to the Office of Student Aid and the FAFSA sent in the envelope enclosed in the FAFSA booklet. FAFSAs need to be submitted for each academic year that begins in Fall and ends in Summer. They are available by January of each year and can be obtained from the Office of Student Aid at Teachers College, or from any college's financial aid office. In completing the FAFSA, students should be sure to indicate that the results should be sent to Teachers College. Students can also apply online. The web address is www.fafsa.ed.gov. Be sure to include the Teachers

College federal code number: G03979.

After filing the FAFSA, students will receive a Student Aid Report (SAR) which must be reviewed for accuracy, and corrected if necessary. If there are questions, contact the Office of Student Aid. Students may also be required to submit copies of their most recent federal tax returns and other supporting documents to verify the information on the FAFSA.

Permanent residents must submit a copy of both sides of their Alien Registration Card to the Office of Student Aid. Permanent residency status must be confirmed with the Immigration and Naturalization Service before aid can be disbursed. Naturalized citizens may need to provide documents to verify citizenship.

Full-time students (at least 12 points or the equivalent) who are New York State residents may be eligible to apply for the Tuition Assistance Program (TAP). Students who want to be considered for TAP must file a FAFSA, giving the federal government permission to release information to New York State. For more information call New York State Higher Education Services Corporation (NYSHESC) at (518) 474-5642 or (800) 642-6234.

How Need-based Eligibility is Determined

The information provided on the FAFSA is applied to a federally designed formula which calculates the "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, President Clinton signed the Taxpayer Relief Act of 1997, which 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. 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: <http://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 full-time, 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.

During the 2000–2001 academic year, the estimated Fall/Spring budget for a full-time student enrolled for 24 points is:

| | |
|--------------------|-----------------|
| Tuition and Fees | \$18,662 |
| Living Allowance | 11,083 |
| Books and Supplies | 2,400 |
| Transportation | 1,340 |
| Miscellaneous | 5,500 |
| Total | \$38,985 |

The family contribution toward academic year living and educational expenses is then deducted from this budget. For example:

| | |
|----------------------------|----------------|
| Budget | \$38,985 |
| <u>Family Contribution</u> | <u>(4,620)</u> |
| Need | \$34,365 |

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 | \$5,640 |
| | (\$705 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 | \$31,640 |

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, still cannot exceed the cost of education.

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: Financial aid is offered to students via the Student Aid Award Letter issued by the Office of Student Aid. Students must accept or decline each component of the offer and return a signed copy to the Office of Student Aid.

For More Information

Visit the Teachers College Office of Student Aid, located in Room 138, Horace Mann Hall, or call (212) 678-3714.

| 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

Teachers College, Columbia University

Please type or print in black ink

Social Security Number _____

Name _____
Last/Family Name First/Given Name Middle Name

Title: Ms. Mr. Other _____ Any prior last/family name: _____

NOTE: Your application will be **processed under the name given above**. If you were registered at any of the institutions listed below under any other name or any variations of your name as given above, please write that name above.

| | | | |
|--------------------------|--------|---------------|---|
| Permanent Address | | | |
| Number | Street | Apt. Number | |
| City | State | Zip Code | (New York State residents only: County) |
| Home Telephone _____ | | Country _____ | |

| | | | |
|--|--------|---------------|--|
| Mailing Address (if different from above) Indicate date of termination, if possible: Month ___ Day ___ Year _____ | | | |
| Number | Street | Apt. Number | |
| City | State | Zip Code | |
| Home Telephone _____ | | Country _____ | |

Work Telephone _____ Fax # _____ e-mail _____

Please indicate the program to which you are applying.

_____ program _____ specialization if required (see program descriptions) T _____ code

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

What would you like to teach?

Subject: _____ Grade level: Elementary Middle School High School

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 | Institution and Location | Department/Major | Degree, Diploma Certificate, License, etc. | GPA | Date of Award |
|---------------------|--------------------------|------------------|--|-----|---------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

DO NOT WRITE BELOW THIS LINE

| | |
|--|--|
| Admission Office: Recommended I II III Pro Defer NRec Signature _____ Date _____ Department: <input type="checkbox"/> Recommended <input type="checkbox"/> Pro <input type="checkbox"/> NRec Signature _____ Date _____ | GSAS: <input type="checkbox"/> Recommended <input type="checkbox"/> Nrec Signature _____ Date _____ <input type="checkbox"/> App <input type="checkbox"/> Degree ND MA MS ME DE DC DP <input type="checkbox"/> Decision AF AD AP AX RJ WL DT <input type="checkbox"/> Response PR NC DF WD <input type="checkbox"/> Tuition Deposit <input type="checkbox"/> Copies made ___ / ___ / ___ <input type="checkbox"/> Letter _____ / ___ / ___ Initial _____ Date _____ |
|--|--|

| |
|----------------------------------|
| Fee Paid |
| <input type="checkbox"/> \$50 |
| <input type="checkbox"/> \$25 |
| <input type="checkbox"/> \$_____ |

Personal Statement. Please attach a brief typed and signed statement describing your background, your past work in your intended field of study, your plans for graduate study and a professional career.

Record of Employment. Please attach a resume or chronological listing of employment and other significant activities.

In which languages do you have adequate proficiency to translate scholarly material? _____

Give the name, official position, address and phone number of the persons you have asked to write references:

| Name | Title | Address | Phone |
|------|-------|---------|-------|
| | | | |
| | | | |
| | | | |

Test Requirements (Please see Admissions Application Instructions to determine if test is required.)

| TEST | GRE | MAT | TOEFL | TWE | ALP (EPT) Columbia's American Language Program (English Placement Test) |
|--------------|---|-----|-------|-----|---|
| Date of Test | | | | | |
| Scores | Verbal____ Quantitative____ Analytical____ Advanced Test____ Which Test?____ | | | | |

Be sure to request that official scores be sent directly to the Office of Admission. The Teachers College code for both GRE & TOEFL is 2905.

Optional: Teachers College has undertaken to ensure equality of educational opportunity and to make our programs and services fair and useful to all students. We would appreciate your providing the following information which will be used for statistical purposes only.

Date of birth: Month____ Day____ Year____ Sex____

I belong to the following group (U.S. citizens and Permanent Residents only)

- Black/African-American Native American/Alaskan Native (Tribal affiliation: _____)
 Asian-American/Pacific Islander White-American
 Latina/Latino (Identify _____) Other _____

Non-U.S. Citizens (International Applicants and U.S. Permanent Residents)

Country of Citizenship _____ Native Language _____

Are you a U.S. Permanent Resident (i.e., hold a "green card")? Yes No

Will you be attending Teachers College on a student visa? Yes No

| | |
|---|---|
| If Yes, check one: <input type="checkbox"/> I will apply to TC for F-1 status (I-20) <input type="checkbox"/> I will apply to TC for J-1 status (IAP-66) <input type="checkbox"/> I will attend TC as a J-1 student sponsored by _____ | If No, what visa status will you hold? _____ |
|---|---|

Please provide the following information and include with your application a copy of the grading/marketing system (if it is not included on the record of studies) used at each university outside the United States that you have attended. You may also use the space below or use a separate sheet to provide additional information about the marking system at each university you have attended, the distribution of marks, or your marks in particular.

| Name of College/University | What marking scale is used? | What is the passing mark? | What is the highest mark obtainable? |
|----------------------------|-----------------------------|---------------------------|--------------------------------------|
| | | | |
| | | | |
| | | | |

I attest that the information provided in this application is true.

Signed _____ Date _____

Reminder: it is your responsibility to complete your application with all supporting material by the deadline.

Letter of Reference

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__ __)

B: To: _____ (applicant 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 provided. 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.)

Letter of Reference

Teachers College Residence Hall Application

*Please return completed application and \$20 non-refundable application fee 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, M.I.) _____ Female Male

Mailing Address _____

Telephone #: _____ Fax #: _____ email: _____

Permanent Address _____ Tel. # _____

SSN/Student Id Number: _____

I plan to move in: Fall (Sept.) _____ Spring (Jan.) _____ Summer A (May) _____ Summer B (July) _____ of Year _____

I am: An incoming Teachers College Student _____ Current Teachers College Student _____

Please rank order your preferences for housing (e.g., 1 = most preferred, 2 = second most preferred, etc.). Preferences are given serious consideration but not guaranteed. Family housing applicants must be accompanied by a copy of your marriage license or Affidavit of Domestic Partnership.

| Single Student Preferences | Family Housing Preferences | | | | | | | | | | | | | | | |
|--|--|---|------|--------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Whittier Hall Single _____ | <i>(Note: Families with children are given preferences for two and three bedroom apartments)</i> Bancroft Hall One Bedroom _____ Bancroft Hall Two Bedroom _____ Bancroft Hall Three Bedroom _____ <i>(only two available)</i> Grant Hall One Bedroom _____ Sarasota Hall One Bedroom _____ Circle One: Courtyard View _____ Street View _____ | | | | | | | | | | | | | | | |
| Whittier Hall Suite _____ | | | | | | | | | | | | | | | | |
| Whittier Hall Efficiency _____ | | | | | | | | | | | | | | | | |
| Whittier Hall Studio _____ | | | | | | | | | | | | | | | | |
| Whittier Hall One Bedroom _____ | | | | | | | | | | | | | | | | |
| Whittier Hall Shared Two Bedroom _____ | | | | | | | | | | | | | | | | |
| Greystone Hotel Efficiency _____ | | | | | | | | | | | | | | | | |
| Circle One: Courtyard View _____ Street View _____ | | | | | | | | | | | | | | | | |
| Circle one: Non-smoking _____ Smoking _____ | | | | | | | | | | | | | | | | |
| | | List all family members who will reside with you. <table border="1"> <thead> <tr> <th>Name</th> <th>Relationship</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> | Name | Relationship | Age | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Name | Relationship | Age | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | |
| _____ | _____ | _____ | | | | | | | | | | | | | | |

Please list on a separate sheet of paper any special circumstances/accommodations which may affect your placement.

The information on this application is correct. I understand that willful misrepresentation on my part would be grounds for nonacceptance of application and/or noncontinuance in Teachers College housing.

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, 535 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.
6. 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;
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)

(Printed Name and Signature of Domestic Partner)

(Date)

This affidavit must be notarized

Notary's Stamp:

(Date Notarized)

Student Aid/Scholarship Application

Teachers College Columbia University Office of Student Aid, Box 309
525 West 120th Street, New York, NY 10027
(212) 678-3714, Fax (212) 678-4089

Please type or print in dark ink

Part A (all applicants)

Name _____
Last/Family Name First/Given Name Middle Name Teachers College I.D. or SS#

| | | | |
|--------------------------|--------|---------------|-------------|
| Permanent Address | | | |
| _____ | _____ | _____ | _____ |
| | Number | Street | Apt. Number |
| _____ | _____ | _____ | _____ |
| City | State | Zip Code | |
| Home Telephone _____ | | Country _____ | |

| | | | |
|--|--------|---------------|-------------|
| Mailing Address (if different from above) Indicate date of termination, if possible: Month ___ Day ___ Year _____ | | | |
| _____ | _____ | _____ | _____ |
| | Number | Street | Apt. Number |
| _____ | _____ | _____ | _____ |
| City | State | Zip Code | |
| Home Telephone _____ | | Country _____ | |

Sex: Male Female

Citizenship Status:

- United States Citizen
- United States Permanent Resident
- International Student (F-1 Visa)
- International Student (J-1 Visa)
- Other Non-Immigrant Status
(Specify Visa Type _____)
- Other Status (Specify _____)

Race/Ethnicity: (United States Citizens and Permanent Residents Only)

- Black/African American
- Asian American/Pacific Islander
- Latina/Latino (Identify _____)
- Native American/Alaskan Native
Tribal Affiliation _____
- White
- Other (Specify _____)

Enrollment Plans:

Indicate the number of points for which you plan to register each semester. **Continuing students:** Please indicate if you plan to register with a special status such as Doctoral Advisement, or if you plan to file a *certificate of equivalency*.

| | | | |
|----------|------|-------|---------------------------------|
| Autumn | 2000 | _____ | Points or Special status: _____ |
| Spring | 2001 | _____ | Points or Special status: _____ |
| Summer A | 2001 | _____ | Points or Special status: _____ |
| Summer B | 2001 | _____ | Points or Special status: _____ |

Please indicate if you plan to enroll in any of the FOLLOWING PROGRAMS:

- | | |
|--|---|
| <input type="checkbox"/> Nurse Executives (Doctoral) | <input type="checkbox"/> AEGIS |
| <input type="checkbox"/> Arts Administration | <input type="checkbox"/> Clinical Psychology (Doctoral) |
| <input type="checkbox"/> Nurse Executives (Master's) | <input type="checkbox"/> Educational Administration—Inquiry |
| <input type="checkbox"/> Clinical Respecialization | |

Anticipated Graduation Date from Teachers College: month _____ year _____

Part B (only those applying for federal or need-based aid)

Do you wish to be considered for Federal Work Study? yes no

Have you ever taken out a federal student loan? yes no

If yes, guaranty agency: Guaranty Agency _____

Direct Loan? _____

Part B (continued)

Will you be living with your parents during the 2000–01 academic year? yes no

Your 2000–01 cost of attendance will be based on standard amounts for tuition and fees, books and supplies, room and board, transportation, and miscellaneous expenses. If you anticipate any unusual expenses not included in these budget items, please explain on a separate sheet.

(Early Aid Estimate) (New Students Only)

If you would like an early estimate of your eligibility for Federal need-based aid (loans and/or work-study), please complete the following:

- 1) Number in household _____
- 2) Student 1999 income earned from work \$ _____
- 3) Spouse 1999 income earned from work \$ _____
- 4) Number in College during 2000–01 (include self) _____
- 5) Year of Birth _____
- 6) Approximate amount of cash, savings and checking accounts \$ _____

If you complete this portion of the application, you will receive an estimate of your eligibility for Federal aid shortly after your admission to Teachers College.

Part C (International Students Only)

Indicate the resources (in U.S. dollars) available to you per year for study at Teachers College:

| | |
|---|---------------|
| Your income | U.S. \$ _____ |
| Your bank savings | U.S. \$ _____ |
| Your spouse's income from work | U.S. \$ _____ |
| Your parents' income/bank savings | U.S. \$ _____ |
| Your government (e.g., scholarship) | U.S. \$ _____ |
| Tuition exemption from Teachers College employment | U.S. \$ _____ |
| Support from others (i.e., friends, relatives, sponsor) | U.S. \$ _____ |
| Other (specify, e.g., private scholarship, organizations) | U.S. \$ _____ |

Part D (all students)

I certify that all information on this application and on other documents I submit for financial aid consideration is correct and accurate. I agree to notify the Office of Student Aid should the information that I have reported or my circumstances change during the academic year.

Signature: _____ Date: _____

Review your answers and return to:
Teachers College, Columbia University
Office of Student Aid
Box 309
525 West 120th Street
New York, NY 10027

For Office Use Only: Tracked by _____ Date _____

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sion, 146 Horace Mann Hall,
Box 302, (212) 678-3710

tcinfo@www.tc.columbia.edu

Career Services:
Career Services Center,
44 Horace Mann Hall,
Box 161, (212) 678-3140

Doctoral Studies:
153 Horace Mann Hall,
Box 304, (212) 678-4058

Employment: Office of
Personnel Services, 112 Main
Hall, Box 149, (212) 678-3175

Student Aid Applications:
Office of Student Aid, 138
Horace Mann Hall, Box 309,
(212) 678-3714

Housing: On-campus
Residence Halls Office,
1st Floor, Whittier Hall,
Box 312, (212) 678-3235

International Services: Student
Life Center, Thorndike Lobby,
Box 308, (212) 678-3406
tcintl@columbia.edu

Payment of Fees: Business
Office, 133 Thompson Hall,
Box 305, (212) 678-3056

Registration, Teacher
Certification, Withdrawal
Notices, Requests for
Transcripts of Records,
Certification to Government

Agencies: Office of the
Registrar, 148 Horace Mann
Hall, Box 311, (212) 678-4050

Notice of Nondiscriminatory Policy as to Students and Employees

Pursuant to Revenue Proce-
dure 75-50 dated December 8,
1975, and Title IX of the Edu-
cation Amendments of 1972
("Title IX") and part 86 of the
Department of Health, Educa-
tion and Welfare 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, Teach-
ers College does not discrimi-
nate on the basis of race, color,
religion, sex, sexual orienta-
tion, national origin, age, or
disability in the administration
of its admission, employment
and educational policies or
scholarship, loan, athletic and
other school-administered pro-
grams. Rather, Teachers Col-
lege affirms that it admits
students and selects employees
regardless of their race, color,
creed or religion, sex, sexual
orientation, national origin,
age, disability and thereafter
accords them all the rights and
privileges generally made
available to students or
employees at the school.

Inquiries regarding the appli-
cation of Title IX of the Edu-
cational Amendments of 1972,
as amended, and regulations
thereunder, to any policy, pro-
gram or other activity of the

College should be directed to
Mr. Donald Dean, the Director
of the Office of Personnel, who
serves as the College's Equal
Opportunity Officer. Mr. Dean
is also designated to coordinate
the College's compliance activi-
ties under the Age Discrimi-
nation in Employment Act of
1967, as amended, and the
Age Discrimination Act of
1975, and can be contacted
through the Office of Person-
nel Services (Box 149, 112
Main Hall, 525 West 120th
Street, New York, NY 10027,
telephone (212) 678-3175.

Inquiries regarding the appli-
cation of Section 504 of the
Rehabilitation Act of 1973, as
amended, and regulations
thereunder, to any policy, pro-
gram 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 Disabili-
ties 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 Broad-
way 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 Col-

lege. 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

