

# SCHOOL OF EDUCATION

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Courses given in the School of Education have the subject code EDUC. For a complete list of subject codes, see Appendix.

The School of Education prepares scholars, teachers, teacher educators, policy analysts, evaluators, researchers, administrators, and other educational specialists. Two graduate degrees with specialization in education are granted by the University: Master of Arts and Doctor of Philosophy. While no undergraduate majors are offered, the school offers a number of courses for undergraduates, an undergraduate honors program, and a variety of tutoring programs.

The School of Education is organized into three program area committees: Curriculum Studies and Teacher Education (C&TE); Psychological Studies in Education (PSE); and Social Sciences, Policy, and Educational Practice (SSPEP).

In addition, several cross-area programs are sponsored by faculty from more than one area. These programs include the doctoral Learning Sciences and Technology Design Program (LSTD); two master's level programs: the Stanford Teacher Education Program (STEP) and the Learning, Design, and Technology Program (LDT); and the undergraduate honors program.

These program area committees function as administrative units that act on admissions, plan course offerings, assign advisers, and determine program requirements. Various concentrations exist within most of these

areas. Faculty members are affiliated primarily with one area but may participate in several programs. While there is a great deal of overlap and interdisciplinary emphasis across areas and programs, students are affiliated with one area committee or program and must meet its degree requirements.

Detailed information about admission and degree requirements, faculty members, and specializations related to these area committees and programs can be found in the publication *School of Education Guide to Graduate Studies* and at <http://ed.stanford.edu>.

The School of Education offers an eight-week summer session for admitted students only. The school offers no correspondence or extension courses, and in accordance with University policy, no part-time enrollment is allowed. Work in an approved internship or as a research assistant is accommodated within the full-time program of study.

## UNDERGRADUATE PROGRAMS

The School of Education focuses on graduate education and research training and does not offer an undergraduate major. However, undergraduate education is of concern to the School, and courses and programs are available to those interested in the field of education. The following courses are appropriate for undergraduates:

- 101. Undergraduate Teaching Practicum
- 102. Culture, Class and Educational Opportunity
- 103A,B,C. Exploring Elementary Teaching
- 106. Interactive Media in Education
- 107. The Politics of International Cooperation in Education
- 110. Sociology of Education: The Social Organization of Schools
- 124. Collaborative Design and Research of Technology: Integrated Curriculum
- 130. Introduction to Counseling
- 131. Mediation for Dispute Resolution
- 134. Career and Personal Counseling
- 149. Theory and Issues in the Study of Bilingualism
- 156A. Understanding Racial and Ethnic Identity Development
- 165. History of Higher Education in the United States
- 178X. Latino Families, Languages, and Schools
- 179. Urban Youth and their Institutions: Research and Practice
- 193A. Listen Up! Core Peer Counseling Skills
- 197. Education and the Status of Women: Comparative Perspective
- 199A,B,C. Undergraduate Honors Seminar
- 201. History of Education in the United States
- 201A. History of African American Education
- 201B. Education for Liberation
- 202. Introduction to Comparative and International Education
- 204. Introduction to Philosophy of Education
- 208B. Curriculum Construction
- 212X. Urban Education
- 214. Popper, Kuhn, and Lakatos
- 218. Topics in Cognition and Learning: Spatial Cognition
- 220B. Introduction to the Politics of Education
- 220D. History of School Reform: Origins, Policies, Outcomes, and Explanations
- 221A. Policy Analysis in Education
- 224. Information Technology in the Classroom
- 243. Writing Across Languages and Cultures: Research on Writing and Writing Instruction
- 247. Moral Education
- 251B. Statistical Analysis in Educational Research: Analysis of Variance
- 270A. Learning to Lead in Public Service Organizations
- 290. Leadership: Research, Policy, and Practice
- 298. Online Learning Communities
- 304. The Philosophical and Educational Thought of John Dewey
- 306D. World, Societal, and Educational Change: Comparative Perspectives
- 323A. Introduction to Education Policy Analysis
- 326. Legal Dilemmas and Administrative Decision Making in Schools
- 342. Child Development and New Technologies
- 354X. School-Based Decision Making
- 369. Human Cognitive Abilities
- 371X. Cognitive Development in Childhood and Adolescence

- 374A. Research Workshop: Knowledge Networks  
 377. Comparing Institutional Forms: Public, Private, and Nonprofit  
 382. Student Development and the Study of College Impact  
 384. Advanced Topics in Higher Education

## HONORS PROGRAM

An honors program is available to undergraduates to supplement their regular majors outside the school. This program permits interested undergraduates at Stanford to build on the training received in their major field of study by pursuing additional courses and a research or practicum project in a related area of education.

Students apply for entry during the junior year. Applications are available at <http://www.stanford.edu/dept/SUSE/honors>. The current director of the program is Professor John Krumboltz. At least one course must be taken from each of the following areas:

1. *Educational policy and history in the U.S.*—EDUC 201, History of Education in the United States; EDUC 202, Introduction to the Study of International Comparative Education; EDUC 165, History of Higher Education in the U.S.
2. *Contemporary problem areas*—courses include: EDUC 179, Urban Youth and their Institutions: Research and Practice; EDUC 149, Theory and Issues in the Study of Bilingualism; EDUC 197, Education and the Status of Women: Comparative Perspectives; EDUC 239, Emerging Issues in Child and Adolescent Development.
3. *Foundational disciplines*—courses include: EDUC 220, Social Sciences and Educational Analysis; EDUC 110, Sociology of Education: Social Organizations of Schools; EDUC 204, Introduction to Philosophy of Education.

A directed reading course as well as directed research courses with a faculty member in Education are also required. Students in the program should enroll in 199A,B,C, Undergraduate Honors Seminar, during their senior year.

Near the end of Spring Quarter, successful candidates for honors orally present brief reports of their work and findings at a mini-conference. All honors students in Education are expected to attend this conference.

## COTERMINAL BACHELOR'S AND MASTER'S PROGRAM

The School of Education admits a small number of students from undergraduate departments within the University into a coterminal bachelor's and M.A. program. For information about the coterminal option through the Stanford Teacher Education Program (STEP), see the details under STEP below. Students in this program receive the bachelor's degree in their undergraduate major and the master's degree in Education. Approval of the student's undergraduate department and admission to the School of Education M.A. program are required. Undergraduates may apply when they have completed at least 120 units, and must submit their application no later than the quarter prior to the expected completion of their undergraduate degree. The number of units required for the M.A. degree depends on the program requirements within the School of Education; the minimum is 45 units.

Applicants may obtain coterminal degree application materials from the School of Education's Admissions Office in Cubberley, Room 140. For University coterminal degree program rules and University application forms, see <http://registrar.stanford.edu/shared/publications.htm#Coterm>.

## GRADUATE PROGRAMS

The School of Education offers several advanced degree programs described below. Requirements vary somewhat across programs. Both University and School of Education requirements must be met for each degree. The University requirements are detailed in the "Graduate Degrees" section of this bulletin. Students are urged to read this section carefully, noting residency, tuition, and registration requirements. A student who wishes to enroll for graduate work in the School of Education must be qualified and admitted to graduate standing by one of the school's area committees and approval of the Associate Dean of Student Affairs.

Complete information about admissions procedures and requirements is available at <http://gradadmissions.stanford.edu>, or by writing Stanford University Graduate Admissions, 630 Serra Street, Suite 120, Stanford, CA 94305-6032, or at <http://ed.stanford.edu/suse>. All applicants, except coterminal applicants, must submit scores from the Graduate Record Examination General Test (verbal, quantitative, and analytical or analytical writing areas); TOEFL scores are also required from those whose first language is not English. Applicants to the Stanford Teacher Education Program are also required to submit specific test scores or acceptable equivalents as required by the California Commission on Teacher Credentialing; see the section on STEP below. Test information is available at <http://ed.stanford.edu/suse/admissions/admissions-application-requirements.html#test-scores>.

## MASTER OF ARTS

The M.A. degree is conferred by the University upon recommendation of the faculty of the School of Education and the University Committee on Graduate Studies. The minimum unit requirement is 45 quarter units earned at Stanford as a graduate student. Students must maintain a grade point average (GPA) of 3.0 or better in courses applicable to the degree, and a minimum of 27 units must be taken in the School of Education. Students typically enroll in 15 to 18 units per quarter. They must enroll in at least 11 units of work each quarter unless their program makes special provision for a lower quarterly minimum. Master's students should obtain detailed program requirements from the master's coordinator, located in academic services in the School of Education. Most programs require a final project, scholarly paper, or monograph. Additional detailed information regarding program content, entrance, and degree requirements is available at <http://ed.stanford.edu>. Upon admission, each student is assigned a faculty adviser from the appropriate area committee to begin early planning of a coherent program.

Master of Arts degrees are offered for the following specializations: Curriculum and Teacher Education.\* Students may specialize in English, Literacy, Mathematics, Science, or History. International Comparative Education International Educational Administration and Policy Analysis Joint Degree Program with Graduate School of Business (MBA/MA) Policy, Organization, and Leadership Studies Learning, Design, and Technology Social Sciences in Education. Students may specialize in anthropology, economics, educational linguistics, history, philosophy or sociology of education, or interdisciplinary studies.

\* This program in CTE is not a credentialing program; see STEP below.

In addition, an M.A. degree with a teaching credential is offered in the Stanford Teacher Education Program.

## STANFORD TEACHER EDUCATION PROGRAM (STEP)

STEP is a twelve-month, full-time program leading to a Master of Arts and a preliminary California teaching credential. STEP offers two Master of Arts programs to prepare college graduates for careers as teachers in single- or multiple-subject classrooms. STEP-Secondary prepares humanities and sciences students to become teachers of English, languages (French, German, Japanese, Spanish), mathematics, science (biology, chemistry, earth science, physics), and history/social science. STEP-Elementary prepares students to be teachers in California multiple-subject classrooms. STEP seeks to prepare and support teachers to work with diverse learners to achieve high intellectual, academic, and social standards by creating equitable and successful schools and classrooms.

The 12-month STEP year begins in June (Secondary) or July (Elementary) with a Summer Quarter of intensive academic preparation and placement in a local summer school. During the academic year, students continue their course work and begin a year-long field placement under the guidance of expert teachers in local schools. The master's degree and teaching credential require a minimum of 45 quarter units, taken during four quarters of continuous residency.

Stanford undergraduates who enroll in STEP through the coterminal program must have their B.A. conferred prior to commencing the four

quarters of the STEP program. Students complete their undergraduate degree prior to beginning in the STEP year which concludes in a master's degree and a recommendation for a California teaching credential.

Applicants to the secondary program are required to pass the California Basic Educational Skills Test (CBEST) and must demonstrate subject matter competence in one of two ways: (1) by passing the California Subject Examination for Teachers (CSET) in their content area; or (2) by completing a California state-approved subject matter preparation program. Applicants to the elementary program are required to pass the California Basic Educational Skills Test (CBEST), and must pass the Reading Instruction Competence Assessment Test (RICA) after admission to the program.

Further information regarding admission requirements, course work, and credential requirements is available at <http://ed.stanford.edu> and in the *School of Education Guide to Graduate Studies*.

## DOCTORAL DEGREES

The School of Education offers the Doctor of Philosophy (Ph.D.) degree in all program area committees. The degree is conferred by the University upon recommendation by the faculty of the School of Education and the University Committee on Graduate Studies. The Ph.D. requires a minimum of 135 units of course work and research completed at Stanford beyond the baccalaureate degree. Students may transfer up to 45 units of graduate course work taken within the past seven years. Students must consult with the doctoral programs officer if they intend to transfer prior course work. Students must maintain a grade point average (GPA) of 3.0 (B) or better in courses applicable to the degree.

Students should note that admission to the doctoral program does not constitute admission to candidacy for the degree. Students must qualify and apply for candidacy by the end of their second year of study and should obtain information about procedures and requirements during their first year from the School's doctoral programs office in Cubberley 135.

The Ph.D. degree is designed for students who are preparing for research work in public school systems, branches of government, or specialized institutions; teaching roles in education in colleges or universities, and research connected with such teaching; or other careers in educational scholarship and research.

Ph.D. students must complete a minor in another discipline taught outside the school, or hold an acceptable master's degree outside the field of education, or complete an approved individually designed distributed minor that combines relevant advanced work taken in several disciplines outside the school.

Upon admission, the admitting area committee assigns an initial adviser from its faculty who works with the student to establish an appropriate and individualized course of study, a relevant minor, and project research plans. Other faculty members may also be consulted in this process. Details about administrative and academic requirements for each area committee and the School of Education, along with the expected timelines to complete program milestones, are given in the publication *School of Education Doctoral Degree Handbook*, available for download at <http://ed.stanford.edu/suse/programs-degrees/>; click on the publication link.

The following doctoral specializations, with their sponsoring area and concentration, are offered:

- Administration and Policy Analysis (SSPEP)
- Anthropology of Education (SSPEP)
- Child and Adolescent Development (PSE)
- Economics of Education (SSPEP)
- Educational Linguistics (SSPEP)
- Educational Psychology (PSE)
- English Education/Literacy Studies (C&TE)
- General Curriculum Studies (C&TE)
- Higher Education (SSPEP)
- History of Education (SSPEP)
- International Comparative Education (SSPEP)
- Learning Sciences and Technology Design (CTE, PSE, SSPEP)
- Mathematics Education (C&TE)
- Organization Studies (SSPEP)
- Philosophy of Education (SSPEP)
- Science Education (C&TE)

- Interdisciplinary Studies (SSPEP)
- History/Social Science Education (C&TE)
- Sociology of Education (SSPEP)
- Teacher Education (C&TE)

## PH.D. MINOR FOR STUDENTS OUTSIDE EDUCATION

Candidates for the Ph.D. degree in other departments or schools of the University may elect to minor in Education. Requirements include a minimum of 20 quarter units of graduate course work in Education and a clear field of concentration. Students choosing to minor in education should meet with the Associate Dean for Student Affairs to determine a suitable course of study early in their program.

## COURSES

### OTHER DIVISIONS OF THE UNIVERSITY

Teachers, administrators, and researchers are expected to have substantial knowledge of a variety of academic fields outside the areas encompassed by professional education. Graduate students in the School of Education are, therefore, urged to consider the courses offered in other divisions of the University in planning their programs.

The numbering of courses in the School of Education identifies the approximate course level and its intended audience:

*Below 100 level*—For undergraduates

*100 level*—Primarily for undergraduates (graduate students may enroll)

*200 and 300 level*—For M.A. and first- and second-year doctoral students, and qualified undergraduates

*400 level*—Research seminars or similar courses primarily for third-year doctoral students and beyond

Course descriptions are in numerical order and indexed by program areas.

An 'X' suffix denotes a new experimental course. With faculty approval, after being taught twice, it can be offered as a regular course in the School of Education.

An 'S' suffix denotes a special course, given only once and usually taught by visiting faculty.

An 'E' suffix denotes a course that is part of the STEP-Elementary curriculum.

## EDUCATION COURSES

**EDUC 92Q. Leadership, Ethics, and the Law**—Stanford Introductory Seminar. Preference to sophomores. Theories and concepts about leadership in public service organizations emphasizing ethical and legal dilemmas and decisions. Skills and dispositions required in educational leadership. How legal dimensions of administrative work raise ethical and moral implications that influence what leaders do.

*5 units, Aut (Davis, S)*

**EDUC 94Q. Catastrophe as Curriculum: Teaching and Representing the Holocaust**—Stanford Introductory Seminar. Preference to sophomores. Theodore Adorno asked whether it was possible to write poetry after Auschwitz; whatever the answer, each year witnesses exponential growth in state-sponsored mandates to teach the Holocaust. How and to what end does catastrophe become curriculum? How to assess what students learn from these efforts. The Nazis' efforts to teach for hate, and contemporary parallels. Historical and educational sources, especially films and memoirs.

*1-2 units, Spr (Wineburg, S)*

**EDUC 98X. Service Learning Practicum**—For Alternative Spring Break program leaders. The skills and philosophical framework to develop and lead an ASB experience.

*1 unit, Aut (McConnell, J)*

**EDUC 101. Undergraduate Teaching Practicum**—Students engage in real world teaching by observing and assisting teachers in the classroom, and being involved in structured interactions such as tutoring. Weekly meetings concerning field experiences, readings, and developing skills and knowledge. This course provides the opportunity to consider whether a teaching career is a good match.

3-5 units, Aut (Wolf, J)

**EDUC 102. Culture, Class, and Educational Opportunity**—Upward Bound and EPASSA counselors work with students from educationally disadvantaged backgrounds. Topics: language education, culture and family, class management, school finance, and community-school relations. Mandatory school visits and classroom observations. Enrollment limited to 15. (SSPEP)

2 units, not given this year

**EDUC 103A. Exploring Elementary Teaching: Seeing a Child through Literacy**—For undergraduates to engage in the real world of teaching; required of all STEP elementary credential candidates. Focus is on teaching struggling young readers. The role of instruction in literacy development; supervised tutoring of a child; seeing the worlds of school, print, and learning through the eyes of a child. Ravenswood Reads tutors encouraged to enroll.

3-4 units, Aut (Juel, C)

**EDUC 103B. Race, Ethnicity, and Linguistic Diversity in Classrooms: Sociocultural Theory and Practices**—(Graduate students register for 337.) Undergraduates engage in the real world of teaching. Focus is on classrooms with students from diverse racial, ethnic and linguistic backgrounds. Studies, writing, and media representation of urban and diverse school settings; implications for transforming teaching and learning. Issues related to developing teachers with attitudes, dispositions, and skills necessary to teach diverse students.

3-4 units, Win (Ball, A)

**EDUC 103C. Educational Policy, Diversity, and English Learners**—Undergraduates engage in the real world of teaching. Historical and legal foundations, and materials, methods, and strategies for English and primary language development. Students tutor an English learner.

3-4 units, Spr (Padilla, A)

**EDUC 106. Interactive Media in Education**—Workshop. (CTE)

3-5 units, not given this year

**EDUC 107. The Politics of International Cooperation in Education**—(Ph.D. students register for 307B; see 307B.) For undergraduates and master's students. (SSPEP/ICE, APA)

3-4 units, not given this year

**EDUC 110. Sociology of Education: The Social Organization of Schools**—(Graduate students register for 310; same as SOC 132/332.) Topics and case studies that elaborate on the embeddedness of classrooms and schools in social environments, spanning school processes such as stratification, authority, moral and technical specialization, curricular differentiation, classroom instruction, voluntary associations, social crowds, and peer influence. (SSPEP) GER:DB-SocSci

4 units, Win (McFarland, D)

**EDUC 115Q. Identities, Race, and Culture in Urban Schools**—Stanford Introductory Seminar. Preference to sophomores. How urban youth come to a sense of themselves as students, members of cultural and racial groups, and young people in urban America. The nature and interaction of racial and academic identities: how identity takes shape; how it has been conceptualized. The relation between identities and learning. Urban schools as contexts for identity development. Theoretical perspectives include psychology, sociolinguistics, sociology, anthropology, and education. Students shadow a high-school student in a public school and write a case study.

3 units, Spr (Nasir, N)

**EDUC 116X. Service Learning as an Approach to Teaching**—History, theory, and practice. Topics include: responsive community partnerships, cultural awareness, the role of reflection, and best practices in service learning.

3 units, Spr (Cotterman, K)

**EDUC 117X. Research and Policy on Postsecondary Access**—(Graduate students register for 417X.) The transition from high school to college. K-16 course focusing on high school preparation, college choice, remediation, pathways to college, and first-year adjustment. The role of educational policy in postsecondary access.

3 units, Win (Antonio, A)

**EDUC 119X. Writing About Education**—Workshop. How to communicate research and thinking in a clear and memorable way. The elements of good writing, word choice, and editing. Choosing the right publication for work; pros and cons of writing for a non-specialist audience; ethics, law, and libel; and how to get published. Students write about their work and share their writing.

1-3 units, not given this year

**EDUC 121X. Leadership and Civic Responsibility**—How leaders from public and private occupations exemplify civic responsibility. Theories and attributes of leadership behavior that promote the public welfare, civic responsibility, and social justice. Relationships among leadership, civic responsibility, and education. Guest speakers.

2 units, not given this year

**EDUC 124. Collaborative Design and Research of Technology: Integrated Curriculum**—For education students interested in math and science curriculum development. Studio-based, hands-on approach to the research and development of technology tools and curriculum materials. Focus is on the role that technologies can play in teaching and learning in the content areas.

3-4 units, Win (Goldman, S)

**EDUC 130. Introduction to Counseling**—The theories and techniques of counseling, emphasizing clients' individual and cultural differences, and construction of one's own theory of the counseling process and outcome. Two psychotherapeutic theories, cognitive-behavioral and existential-humanistic, supplemented with a third theory of student's choice. Experiential, problem-based focus on how to develop self-awareness and conceptual understandings of the counseling process in culturally diverse contexts. (PSE)

3 units, Win (Krumboltz, J)

**EDUC 131. Mediation for Dispute Resolution**—(Same as PSYCH 152.) Mediation as more effective and less expensive than other forms of settling disputes such as violence, lawsuits, or arbitration. How mediation can be structured to maximize the chances for success. Simulated mediation sessions.

3 units, Aut (Krumboltz, J)

**EDUC 134. Career and Personal Counseling**—(Graduate students register for 234; same as PSYCH 192.) Methods of integrating career and personal counseling with clients and counselors from differing backgrounds. Practice with assessment instruments. Case studies of bicultural role conflict. Informal experience in counseling. (PSE)

3 units, Spr (Krumboltz, J)

**EDUC 136. World, Societal, and Educational Change: Comparative Perspectives**—(Graduate students register for 306D; see 306D; same as SOC 231.)

4-5 units, Win (Wotipka, C)

**EDUC 144X. STEP Elementary Child Development**—How schools form a context for children's social and cognitive development. Focus is on early and middle childhood. Transactional processes between children and learning opportunities in classroom contexts. Topics include: alternative theoretical perspectives on the nature of child development; early experience and fit with traditional school contexts; assessment practices and implications for developing identities as learners; psychological conceptions of motivational processes and alternative perspectives; the role of peer relationships in schools; and new designs for learning environments. Readings address social science and methodological issues.

3-4 units, Aut (Perez-Granados, D)

**EDUC 148X. Critical Perspectives on Teaching and Tutoring English Language Learners**—Theoretical foundation for volunteer tutors of English language learners in urban environments working with children in school-based programs or adults in community-based settings.

3 units, Aut (Moorthy, S)

**EDUC 149. Theory and Issues in the Study of Bilingualism**—(Graduate students register for 249; see 249; same as SPANLIT 207.) (SSPEP) GER:DB-Hum

3-5 units, Aut (Valdés, G)

**EDUC 150. Introduction to Data Analysis and Interpretation**—Primarily for master's students with little or no experience. Focus is on reading literature and interpreting descriptive and inferential statistics, especially those commonly found in education. Topics: basic research design, instrument reliability and validity, description statistics, correlation, t-tests, one-way analysis of variance, and simple and multiple regression.

4 units, Aut, Win (Porteus, A)

**EDUC 151. Introduction to Qualitative Research Methods**—Primarily for master's students. Issues, ideas, and methods.

3-4 units, Aut (Pope, D), Win (Wolf, J)

**EDUC 153X. School Choice: The Role of Charter Schools**—Is school choice, including vouchers, charter schools, contract schools, magnet schools, district options, and virtual schools, a threat or an opportunity for public education? Focus is on the charter school movement nationally and in California as reform strategy. Roles and responsibilities of charter schools emphasizing issues of governance, finance, curriculum, standards, and accountability.

3 units, not given this year

**EDUC 156A. Understanding Racial and Ethnic Identity Development**—African American, Native American, Mexican American, and Asian American racial and ethnic identity development; the influence of social, political and psychological forces in shaping the experience of people of color in the U.S. The importance of race in relationship to social identity variables including gender, class, and occupational, generational, and regional identifications. Bi- and multiracial identity status, and types of white racial consciousness.

3-5 units, not given this year

**EDUC 160. Introduction to Statistical Methods in Education**—(Master's students register for 150.) For doctoral students with little or no prior statistics. Organization of data, descriptive statistics, elementary methods of inference, hypothesis testing, and confidence intervals. Computer package used. Students cannot also receive credit for PSYCH 60 or STATS 60/160. (all areas)

4 units, Aut (Shavelson, R)

**EDUC 165. History of Higher Education in the U.S.**—(Graduate students register for 265; see 265.)

3-4 units, Win (Williamson, J)

**EDUC 166. The Centrality of Literacies in Teaching and Learning**—Focus is on principles in understanding, assessing, and supporting the reading and writing processes, and the acquisition of content area literacies in secondary schools. Literacy demands within particular disciplines and how to use oral language, reading, and writing to teach content area materials more effectively to all students. (STEP)

3 units, Sum (Ball, A)

**EDUC 167. Educating for Equity and Democracy**—Introduction to the theories and practices of equity and democracy in education. How to think about teaching and schooling in new ways; the individual moral and political reasons for becoming a teacher. (STEP)

3 units, Sum (McDermott, R)

**EDUC 177. Education of Immigrant Students: Psychological Perspectives**—(Graduate students register for 277.) Historical and contemporary approaches to educating immigrant students. Case study approach focuses on urban centers to demonstrate how stressed urban educational agencies serve immigrants and native-born U.S. students when confronted with overcrowded classrooms, controversy over curriculum, current school reform movements, and government policies regarding equal educational opportunity. (SSPEP)

4 units, Win (Padilla, A)

**EDUC 178X. Latino Families, Languages, and Schools**—The challenges facing schools to establish school-family partnerships with newly arrived Latino immigrant parents. How language acts as a barrier to home-school communication and parent participation. Current models of parent-school collaboration and the ideology of parental involvement in schooling. (SSPEP)

3-5 units, not given this year

**EDUC 179. Urban Youth and Their Institutions: Research and Practice**—(Graduate students register for 279.) The determinants and consequences of urban life for youth, emphasizing disciplinary and methodological approaches, and the gap between the perspectives of state and local organizations and those of youth and their communities. The diversity of urban youth experiences with respect to ethnicity, gender, and immigration histories. Case studies illustrate civic-level and grassroots institutions, their structures, networks, and philosophies; historical and contemporary realities of urban youth for policy makers, educators, and researchers. Limited enrollment. Prerequisite: consent of instructor. (SSPEP/APA)

4-5 units, Aut (McLaughlin, M)

**EDUC 180. Directed Reading in Education**—For undergraduates and master's degree students. (all areas)

1-15 units, Aut, Win, Spr, Sum (Staff)

**EDUC 185. Master's Thesis**—(all areas)

1-15 units, Aut, Win, Spr, Sum (Staff)

**EDUC 190. Directed Research in Education**—For undergraduates and master's students. May be repeated for credit. (all areas)

1-15 units, Aut, Win, Spr, Sum (Staff)

**EDUC 191X. Introduction to Survey Research**—Planning tasks, including problem formulation, study design, questionnaire and interview design, pretesting, sampling, interviewer training, and field management. Epistemological and ethical perspectives. Issues of design, refinement, and ethics in research that crosses boundaries of nationality, class, gender, language, and ethnicity.

3-4 units, Win (Adams, J)

**EDUC 193A. Listen Up! Core Peer Counseling Skills**—Topics: verbal and non-verbal skills, open and closed questions, paraphrasing, working with feelings, summarization, and integration. Individual training, group exercises, role play practice with optional video feedback. Sections on relevance to crisis counseling and student life. Guest speakers from University and community agencies. Students develop and apply skills in University settings.

2 units, Aut, Win, Spr (Mendoza-Newman, M)

**EDUC 193B. Peer Counseling in the Chicano/Latino Community**—Topics: verbal and non-verbal attending and communication skills, open and closed questions, working with feelings, summarization, and integration. Salient counseling issues including Spanish-English code switching in communication, the role of ethnic identity in self-understanding, the relationship of culture to personal development, and Chicana/o student experience in University settings. Individual training, group exercises, role play, and videotape practice.

1 unit, Aut (Martinez, A)

**EDUC 193C. Peer Counseling in the African American Community**—Topics: the concept of culture, Black cultural attributes and their effect on reactions to counseling, verbal and non-verbal attending, open and closed questions, working with feelings, summarization, and integration. Reading assignments, guest speakers, role play, and videotaped practice. Students develop and apply skills in the Black community on campus or in other settings that the student chooses.

*1 unit, Aut (Edwards, S)*

**EDUC 193F. Peer Counseling: Asian American Community**—Topics: the Asian family structure, and concepts of identity, ethnicity, culture, and racism in terms of their impact on individual development and the counseling process. Emphasis is on empathic understanding of Asians in America. Group exercises.

*1 unit, Spr (Brown, N)*

**EDUC 193N. Peer Counseling in the Native American Community**—Verbal and non-verbal communication, strategic use of questions, methods of dealing with strong feelings, and conflict resolution. How elements of counseling apply to Native Americans including client, counselor, and situational variables in counseling, non-verbal communication, the role of ethnic identity in self-understanding, the relationship of culture to personal development, the impact of family on personal development, gender roles, and the experience of Native American students in university settings. Individual skill development, group exercises, and role practice.

*1 unit, Win (Simms, W)*

**EDUC 193P. Peer Counseling at the Bridge**—For those who continue to study counseling methods while counseling students.

*1 unit, Aut, Win, Spr (Mendoza-Newman, M)*

**EDUC 193S. Peer Counseling on Comprehensive Sexual Health**—Factual information on sexually transmitted infections and diseases, and birth control methods. Topics related to sexual health such as communication, societal attitudes and pressures, pregnancy, abortion, and the range of sexual expression. Role-play and peer-education outreach projects. Required for those wishing to counsel at the Sexual Health Peer Resource Center (SHPRC).

*1 unit, Aut, Win, Spr (Martinez, A)*

**EDUC 197. Education and the Status of Women: Comparative Perspective**—Theories and perspectives from the social sciences relevant to the role of education in changing, modifying, or reproducing structures of gender differentiation and hierarchy. Cross-national research on the status of women and its uses to evaluate knowledge claims. (SSPEP) GER:EC-Gender

*4-5 units, Aut (Wotipka, C)*

**EDUC 198X. Tutoring with Adolescents: Ravenswood Writes**—(Same as PWR 198X.) Strategies and approaches for teaching writing to students from diverse backgrounds and languages, and cultural and learning styles. Course prepares students to become tutors for Ravenswood Writes. Prerequisites: application and committee approval.

*3 units, Spr (Ball, A; Lunsford, A; Tinker, J)*

**EDUC 199A,B,C. Undergraduate Honors Seminar**—Required of juniors and seniors in the honors program in the School of Education. Student involvement and apprenticeships in educational research. Participants share ongoing work on their honors thesis. Prerequisite: consent of instructor.

*1 unit, A: Aut, B: Win, C: Spr (Krumboltz, J)*

**EDUC 201. History of Education in the United States**—How education came to its current forms and functions, from the colonial experience to the present. Focus is on the 19th-century invention of the common school system, 20th-century emergence of progressive education reform, and the developments since WWII. The role of gender and race, the development of the high school and university, and school organization, curriculum, and teaching. (SSPEP)

*3-4 units, Win (Williamson, J)*

**EDUC 201A. History of African American Education**—Pivotal points in African American educational history including literacy attempts during slavery, the establishment of historically Black colleges and universities, the debate between liberal and vocational education, Black student rebellions on campuses during the 20s, and the establishment of Black studies and cultural centers. (SSPEP)

*3-4 units, not given this year*

**EDUC 201B. Education for Liberation**—How ethnic, gender, and religious groups have employed education to advance group self-determination and autonomy throughout history. How reformers attempted to impose educational prescriptions on these groups.

*3-4 units, Aut (Williamson, J)*

**EDUC 202. Introduction to Comparative and International Education**—Contemporary theoretical debates about educational change and development, and the international dimension of issues in education. Emphasis is on the development of students' abilities to make cross-national and historical comparisons of educational phenomena. (SSPEP/ICE)

*4-5 units, Aut (Staklis, S)*

**EDUC 202I. Education Policy Workshop in International and Comparative Education**—For students in International and Comparative Education. Practical introduction to issues in educational policy making, educational planning, implementation, and the role of foreign expertise/consultants in developing country contexts. (SSPEP/ICE)

*3-4 units, Win (Staklis, S)*

**EDUC 204. Introduction to Philosophy of Education**—How to think philosophically about educational problems. Recent influential scholarship in philosophy of education. No previous study in philosophy required. (SSPEP)

*3 units, Aut (Callan, E)*

**EDUC 206A. Applied Research Methods in International and Comparative Education I: Introduction**—Required of M.A. students in ICE and IEAPA; others by consent of instructor. Orientation to the M.A. program and research project; exploration of resources for study and research. (SSPEP/ICE)

*1 unit, Aut (Staklis, S)*

**EDUC 206B. Applied Research Methods in International and Comparative Education II: Master's Monograph Proposal**—Required of M.A. students in ICE and IEAPA; others by consent of instructor. Development of research skills through theoretical and methodological issues in comparative and international education. Preparation of a research proposal for the M.A. monograph. (SSPEP/ICE)

*1-3 units, Win (Staklis, S)*

**EDUC 206C. Applied Research Methods in International and Comparative Education III: Master's Monograph Workshop**—The conclusion of the four quarter M.A. program in ICE and IEAPA; required of M.A. students. Reviews of students' research in preparation for their master's monograph. (SSPEP/ICE)

*3 units, Sum (Staklis, S)*

**EDUC 208B. Curriculum Construction**—The theories and methods of curriculum development and improvement. Topics: curriculum ideologies, perspectives on design, strategies for diverse learners, and the politics of curriculum construction and implementation. Students develop curriculum plans for use in real settings. (CTE)

*3-4 units, Win (Pope, D)*

**EDUC 211. Master's Seminar in Social Sciences in Education**—Limited to master's students in SSE. Hands-on forum. The process of developing and shaping a research program, integrating it with academic and field experiences, and building relationships beyond the program. Students conceptualize their projects and focus on researchable topics: effective revising and editing, job searches, working with your adviser, what next? or a celebration of achievements so far. (SSPEP)

*1-3 units, Aut, Win, Spr (Suarez, D)*

**EDUC 212X. Urban Education**—Open to graduate students and undergraduates. Combination of historical and anthropological perspectives trace the major developments, contexts, tensions, challenges, and policy issues of urban education.

*3-4 units, Spr (Staff)*

**EDUC 214. Popper, Kuhn, and Lakatos**—(Same as PHIL 156.) These 20th-century philosophers of science raise fundamental issues dealing with the nature of scientific progress: the rationality of change of scientific belief, science versus non-science, role of induction in science, truth or verisimilitude as regulative ideals. Their impact in the social sciences and applied areas such as educational research. (SSPEP)

*3 units, not given this year*

**EDUC 215X. International Human Rights and Education**—Theory and practice. Focus is on how education may be seen as a human rights issue and a tool to educate citizens about their human rights. The history of human rights and the spread of the international human rights regime in terms of organizations and treaties. Issues include street and working children, language rights, and women's right to education.

*4-5 units, Spr (Wotipka, C)*

**EDUC 217. Philosophical and Methodological Issues in Educational Research**—The role causation in educational phenomena, and how to determine causal factors. Is educational research based on a positivistic paradigm? Randomized controlled experimental designs. Criteria for judging the rigor of qualitative modes of inquiry. Do Popperian or Deweyan approaches hold the key to resolving contentious issues? Does a postpositivist perspective hold promise?

*3 units, not given this year*

**EDUC 218. Topics in Cognition and Learning: Transfer**—How people recruit perceptual mechanisms (such as for navigating, learning about spatial relations such as driving a car, or inferring the behavior of novel devices) to understand symbolic and conceptual domains. Do hands-on activities with physical objects promote the development of mathematical thinking? May be repeated for credit.

*3 units, Aut (Schwartz, D)*

**EDUC 219E. Visual Arts in Elementary Education**—For undergraduates in STEP Elementary Program and others interested in the arts or elementary teaching. Hands-on exploration of visual arts media and works of art.

*3-4 units, Spr (Staff)*

**EDUC 220A,B,C,D,Y. The Social Sciences and Educational Analysis**—Required of students in APA and open to all. Economics, political science, sociology, and history, and their applications to education in the U.S.

**EDUC 220A. Introduction to the Economics of Education**—The relationship between education and economic analysis. Topics: labor markets for teachers, the economics of child care, the effects of education on earnings and employment, the effects of education on economic growth and distribution of income, and the financing of education. Students who lack training in microeconomics, register for 220Y for 1 additional unit of credit. (SSPEP/APA)

*4 units, Spr (Loeb, S)*

**EDUC 220B. Introduction to the Politics of Education**—(Same as GSBGEN 349.) The relationships between political analysis and policy formulation in education; focus is on alternative models of the political process, the nature of interest groups, political strategies, community power, the external environment of organizations, and the implementations of policy. Applications to policy analysis, implementation, and politics of reform. (APA)

*4 units, Spr (Davis, S)*

**EDUC 220C. Education and Society**—(Same as SOC 130/230.) The effects of schools and schooling on individuals, the stratification system, and society. Education as socializing individuals and as legitimizing social institutions. The social and individual factors affecting the expansion of schooling, individual educational attainment, and the organizational structure of schooling.

*4-5 units, Aut (Suarez, D)*

**EDUC 220D. History of School Reform: Origins, Policies, Outcomes, and Explanations**—Required of students in the POLS M.A. program; others welcome. Focus is on 20th-century U.S. Intended and unintended patterns in school change; the paradox of reform that schools are often reforming but never seem to change much; rhetorics of reform and factors that inhibit change. Case studies emphasize the American high school. (SSPEP/APA)

*3-5 units, Aut (Labaree, D)*

**EDUC 220Y. Introduction to the Economics of Education: Economics Section**—For those taking 220A who have not had microeconomics before or who need a refresher. Corequisite: 220A. (SSPEP/APA)

*1-2 units, Spr (Loeb, S)*

**EDUC 221A. Policy Analysis in Education**—Major concepts associated with the development, enactment, and execution of educational policy. Issues of policy implementation, agenda setting and problem formulation, politics, and intergovernmental relations. Case studies. Goal is to identify factors that affect how analysts and policy makers learn about and influence education. Limited enrollment. Prerequisite: consent of instructor. (SSPEP/APA)

*4-5 units, Win (McLaughlin, M)*

**EDUC 222. Resource Allocation in Education**—Problems of optimization and design, and evaluation of decision experience. Marginal analysis, educational production functions, cost effectiveness and cost-benefit analysis, constrained maximization, program evaluation. Introduction to linear models for large-scale data analysis. Implications to model assumptions. (SSPEP)

*4-5 units, Spr (Carnoy, M)*

**EDUC 223. Good Schools: Research, Policy, and Practice**—Recent studies of schools that exceed expectations in producing desired results. Research methodologies, findings of studies, and efforts to implement results. Components of good schools analyzed: effective teaching, principal leadership, organizational processes, parent involvement, cultures in schools, the role of the superintendent. Required project studies a school and determines goodness. (SSPEP/APA, CTE)

*3-4 units, not given this year*

**EDUC 224. Information Technology in the Classroom**—The use of information technology (computers, interactive video, telecommunications) in classroom teaching. Basic computer operations and terminology; challenges of planning and teaching with technology; judging the merits of products for educational uses; uses made of technology in schools; and economic, social, and ethical issues emphasizing equity. (CTE)

*3 units, not given this year*

**EDUC 226X. Empirical Analysis of Education Governance**—Emphasis is on strategies for empirical evaluation. Topics include: school board, superintendent, and principal decision making; the state role in education policy and budgeting; the impact of teacher unionization; and the growing influence of private foundations and parent associations. Students participate in an original data collection effort for an ongoing research project.

*3 units, not given this year*

**EDUC 228E. Becoming Literate in School I**—First in a three course sequence. Introduction to reading and language arts theory and methodology for candidates in the elementary Multiple Subjects Credentialing program. Instructional methods, formats, and materials.

*2 units, Sum (Juel, C)*

**EDUC 228F. Becoming Literate in School II**—Second in a three-course required sequence of reading and language arts theory and methodology for candidates in the elementary Multiple Subjects Credentialing program. Theories for guiding instruction and curricular choices.

*3 units, Aut (Juel, C)*

**EDUC 228G. Becoming Literate in School III**—Third in a three-course required sequence of reading and language arts theory and methodology for candidates in the elementary Multiple Subjects Credentialing program. Theories for guiding instruction and curricular choices.

*4 units, Win (Staff)*

**EDUC 229A,B,C,D. Learning Design and Technology Seminar**—Four quarter seminar core of the LDT master’s program. Designs for learning with technology. Issues and processes relating to internships and careers. Major learning, design, and technology project. Students navigate design sequences in learning environments rooted in practical problems. Theoretical and practical perspectives, hands-on development, and collaborative efforts. (all areas)

**A:** 3 units, Aut (Ryoo, K)

**B:** 3 units, Win (Ryoo, K)

**C:** 1-3 units, Spr (Ryoo, K)

**D:** 3-4 units, Sum (Ryoo, K)

**EDUC 231X. Developing and Supporting Teaching**—How do teachers learn to teach and what kinds of mentoring and coaching helps to develop their practice? A strong knowledge base and skills of reflective inquiry increase the odds that students are served in a teacher’s classroom. How is the development of successful teaching supported? What does effective mentoring look like? What are the dilemmas faced by mentors? The research on adult learning and learning to teach, developing skills such as giving productive feedback and co-planning. Methods: teaching videos, role play, and theory, research, and practice concerning mentoring.

3 units, Spr (Williamson, P)

**EDUC 232A. The Study of Teaching**—Second of three core courses in CTE. Theory and practice of teaching, past and present, K-12 and higher education. (CTE)

4 units, not given this year

**EDUC 232B. Introduction to Curriculum**—First of three core courses in CTE. What should American schools teach? How should school programs be organized? How can schools determine whether their goals have been achieved? What kind of school organization helps teachers improve their teaching? Historical and contemporary perspective on the curriculum of American schools. Interactions among curriculum, the organizational structure of schools, the conception of the teacher’s role, and teaching and student learning assessment. Text, video analysis of teaching, and small group discussions. (CTE)

4 units, not given this year

**EDUC 232C. Introduction to Learning**—Core course in CTE and PSE. Theoretical perspectives and research on learning, emphasizing principles that inform the design and study of learning environments. Historical background to current controversies. Issues: methods of assessment; learning by individuals and groups who differ in gender or in cultural and social backgrounds; the generality of learning outcomes; relations between the growth of conceptual understanding and cognitive skill; learning as becoming a more effective participant in social practices; and the development of influential conceptualizations of learning. (CTE, PSE)

4 units, not given this year

**EDUC 233A. Counseling Interventions from a Multicultural Perspective**—Students engage in an ongoing mentoring relationship with an adolescent from a youth-serving organization. The impact of culture on mentoring. Intervention with children and adolescents, forming positive connections, demonstrating empathy, learning culturally specific caring norms, participating in activities promoting positive youth development. Students are expected to maintain this relationship for at least one additional quarter.

3 units, Aut (LaFromboise, T)

**EDUC 233B. Counseling Interventions from a Multicultural Perspective**—Continuation of 233A. Topics include: developmental psychology and service learning; collaborating with the community; psychological research on altruism and prosocial behavior; volunteers’ motivations; attributions about poverty, and the problem of prejudice.

3 units, Win (LaFromboise, T)

**EDUC 234. Career and Personal Counseling**—(Undergraduates register for 134; see 134; same as PSYCH 192.) (PSE)

3 units, Spr (Krumboltz, J)

**EDUC 239. Emerging Issues in Child and Adolescent Development**—Focus is on critical social and developmental issues that affect children and adolescents. Topics: divorce and single parenting, child care, poverty, sexuality, and mass media, emphasizing the impact of these conditions on normal development, education, and school-related social and cognitive performance. (PSE)

4 units, Spr (Padilla, A)

**EDUC 240. Adolescent Development and Learning**—How do adolescents develop their identities, manage their inner and outer worlds, and learn? Presuppositions: that fruitful instruction takes into account the developmental characteristics of learners and the task demands of specific curricula; and that teachers can promote learning and motivation by mediating among the characteristics of students, the curriculum, and the wider social context of the classroom. Prerequisite: STEP student or consent of instructor. (STEP)

3 units, Aut (LaFromboise, T; Padilla, A; Ramos-Beban, N)

**EDUC 243. Writing Across Languages and Cultures: Research in Writing and Writing Instruction**—Theoretical perspectives that have dominated the literature on writing research. Reports, articles, and chapters on writing research, theory, and instruction; current and historical perspectives in writing research and research findings relating to teaching and learning in this area.

3-4 units, not given this year

**EDUC 244. Classroom Management**—Student and teacher roles in developing a classroom community. Strategies for classroom management within a theoretical framework.

1 unit, Aut (Haysman, C)

**EDUC 244E. Elementary Classroom Culture and Management**—How to best manage a classroom. Student and teacher roles in developing a classroom community. Strategies for classroom management within a theoretical framework.

1 unit, Sum (Costanzo, R)

**EDUC 244F. Elementary Classroom Culture and Management**—Skills for developing a positive classroom learning environment. Theoretical issues and opportunities to acquire strategies and make links with practice teaching class.

1 unit, Aut (Staff)

**EDUC 246A,B,C,D. Secondary Teaching Seminar**—Preparation and practice in issues and strategies for teaching in classrooms with diverse students. Topics: instruction, curricular planning, classroom interaction processes, portfolio development, teacher professionalism, patterns of school organization, teaching contexts, and government educational policy. Classroom observation and student teaching with accompanying seminars during each quarter of STEP year. 16 units required for completion of the program. Prerequisite: STEP student.

**A:** 2 units, Sum (Lotan, R; Haysman, C)

**B:** 1-3 units, Aut (Lotan, R)

**C:** 7-9 units, Win (Lotan, R)

**D:** 2-6 units, Spr (Lotan, R)

**EDUC 246E,F,G,H. Elementary Teaching Seminar**—Integrating theory and practice in teacher development. Topics include: equity, democracy, and social justice in the context of teaching and learning; teacher reflection, inquiry, and research; parent/teacher relationships; youth development and community engagement; professional growth and development; teacher leadership and school change processes; preparation for the job search, the STEP Elementary Portfolio, and the STEP Elementary Conference. Prerequisite: STEP student.

**E:** 2 units, Sum (Geiser, K)

**F:** 2-3 units, Aut (Geiser, K)

**G:** 7 units, Win (Geiser, K)

**H:** 5 units, Spr (Geiser, K)



**EDUC 247. Moral Education**—Contemporary scholarship and educational practice related to the development of moral beliefs and conduct in young people. The psychology of moral development; major philosophical, sociological, and anthropological approaches. Topics include: natural capacities for moral awareness in the infant; peer and adult influences on moral growth during childhood and adolescence; extraordinary commitment during adulthood; cultural variation in moral judgment; feminist perspectives on morality; the education movement in today's schools; and contending theories concerning the goals of moral education. (PSE)

3 units, Win (Damon, W)

**EDUC 249. Theory and Issues in the Study of Bilingualism**—(Undergraduates register for 149; same as SPANLIT 207.) Sociolinguistic perspective. Emphasis is on typologies of bilingualism, the acquisition of bilingual ability, description and measurement, and the nature of societal bilingualism. Prepares students to work with bilingual students and their families and to carry out research in bilingual settings. (SSPEP)

3-5 units, Aut (Valdés, G)

**EDUC 250A. Inquiry and Measurement in Education**—Part of doctoral research core. The logic of scientific inquiry in education, including identification of research questions, selection of qualitative or quantitative research methods, design of research studies, measurement, and collection, analysis and interpretation of evidence. Pre- or corequisite: 160.

4 units, Aut (Antonio, A; Haertel, E)

**EDUC 250B. Statistical Analysis in Education: Regression**—Primarily for doctoral students; part of doctoral research core; prerequisite for advanced statistical methods courses in School of Education. Basic regression, a widely used data-analytic procedure, including multiple and curvilinear regression, regression diagnostics, analysis of residuals and model selection, logistic regression. Proficiency with statistical computer packages. Prerequisite: 160 or equivalent. (all areas)

4 units, Win (Reardon, S)

**EDUC 250C. Qualitative Analysis in Education**—Primarily for doctoral students; part of doctoral research core. Methods for collecting and interpreting qualitative data including case study, ethnography, discourse analysis, observation, and interview.

4 units, Win (Barron, B; Goldman, S)

**EDUC 251B. Statistical Analysis in Educational Research: Analysis of Variance**—Primarily for doctoral students. ANOVA models as widely used data analytic procedures, especially in experimental, quasi-experimental, and criterion-group designs. Topics: single-factor ANOVA; factorial between and within subjects and mixed design ANOVA (fixed, random, and mixed models); analysis of covariance; and multiple comparison procedures. Prerequisite: 250A or equivalent. (all areas)

4 units, Spr (Shavelson, R)

**EDUC 251C. Statistical Analysis in Educational Research: Applied Multivariate Analysis**—Primarily for doctoral students in education, social, and behavioral sciences. Multivariate analysis of variance, discriminant analysis, factor analysis, correlation analysis. Advanced regression methods. Data compression: principal components analysis, clustering. Computer packages for data analysis. Prerequisite: 250B, 257, STATS 200, or equivalent. (all areas)

1-4 units, Win (Olkin, I)

**EDUC 252. Introduction to Test Theory**—Concepts of reliability and validity; derivation and use of test scales and norms; mathematical models and procedures for test validation, scoring, and interpretation. Prerequisite: STATS 190 or equivalent. (PSE)

3-4 units, not given this year

**EDUC 256. Psychological and Educational Resilience Among Children and Youth**—Psychological and educational theories of resilience as they relate to children and youth. Emphasis is on family, school, and community assets as they relate to protective factors that create conditions of resilience. How protective factors can be used to create healthy communities that enhance the life qualities of at-risk children and youth.

3-4 units, not given this year

**EDUC 257A. Statistical Methods for Behavioral and Social Sciences**—For students with experience in empirical research. Analysis of data from experimental studies through factorial designs, randomized blocks, repeated measures; regression methods through multiple regression, model building, analysis of covariance; categorical data analysis through log-linear models, logistic regression. Integrated with the use of statistical computing packages. Prerequisite: analysis of variance and regression at the level of STATS 161.

3 units, Win (Rogosa, D)

**EDUC 257B. Statistical Methods for Behavioral and Social Sciences**—For students with experience in empirical research. Analysis of data from experimental studies through factorial designs, randomized blocks, repeated measures; regression methods through multiple regression, model building, analysis of covariance; categorical data analysis through log-linear models, logistic regression. Integrated with the use of statistical computing packages. Prerequisite: analysis of variance and regression at the level of STATS 161.

3 units, Spr (Rogosa, D)

**EDUC 257C. Causal Inference in Quantitative Educational and Social Science Research**—(Same as SOC 257.) Quantitative methods to make causal inferences in the absence of randomized experiment including the use of natural and quasi-experiments, instrumental variables, regression discontinuity, matching estimators, longitudinal methods, fixed effects estimators, and selection modeling. Assumptions implicit in these approaches, and appropriateness in research situations. Students develop research proposals relying on these methods. Prerequisites: exposure to quantitative research methods; multivariate regression.

3 units, Spr (Reardon, S)

**EDUC 258X. Literacy Development and Instruction**—Literacy acquisition as a developmental and educational process. Problems that may be encountered as children learn to read. How to disentangle home, community, and school instruction from development.

3 units, Win (Juel, C)

**EDUC 259X. Application of Hierarchical Linear Models in Behavioral and Social Research**—(Same as OB 682.) The measurement of change and the assessment of multi-level effects or the unit of analysis problem. The inadequacy of traditional statistical techniques for the modeling of hierarchy.

4 units, Win (Bryk, A)

**EDUC 260X. Understanding Statistical Models and their Social Science Applications**—(Same as STATS 209.) Information that statistical modeling can provide in experimental and non-experimental settings emphasizing misconceptions in social science applications such as causal modeling. Text is *Statistical Models: Theory and Practice*, by David Freedman. See <http://www-stat.stanford.edu/~rag/stat209>. Prerequisite: intermediate-level statistical methods including multiple regression, logistic regression, and log-linear models.

3 units, Spr (Rogosa, D)

**EDUC 262A,B,C. Curriculum and Instruction in English**—Approaches to teaching English in the secondary school, including goals for instruction, teaching techniques, and methods of evaluation. (STEP)

A: 2 units, Sum (Grossman, P)

B: 3 units, Aut (Williamson, P; Igra, D)

C: 3 units, Win (Williamson, P; Igra, D)

**EDUC 263A,B,C. Curriculum and Instruction in Mathematics**—The purposes and programs of mathematics in the secondary curriculum; teaching materials, methods. Prerequisite: STEP student or consent of instructor. (STEP)

A: 2 units, Sum (Staff)

B: 3 units, Aut (Dieckmann, J; Ronfeldt, M; Shahan, E)

C: 3 units, Win (Dieckmann, J; Ronfeldt, M; Shahan, E)

**EDUC 263E,F,G. Quantitative Reasoning in Mathematics**—Three-course sequence for STEP elementary teacher candidates. Content, pedagogy, and context. Mathematics subject matter. Curriculum and other materials, classroom and lesson design, and case studies. Issues include sociocultural and linguistic diversity, equity, differentiation of instruction, state and national standards, and home/community connections.

**E:** 2 units, *Sum (Murata, A)*

**F:** 3 units, *Aut (Murata, A)*

**G:** 4 units, *Win (Murata, A)*

**EDUC 264A,B,C. Curriculum and Instruction in World Languages**—Approaches to teaching foreign languages in the secondary school, including goals for instruction, teaching techniques, and methods of evaluation. Prerequisite: STEP student. (STEP)

**A:** 2 units, *Sum (Valdés, G)*

**B:** 3 units, *Aut (Valdés, G)*

**C:** 3 units, *Win (Kibler, A; Philipose, S)*

**EDUC 264E. Methods and Materials in Bilingual Classrooms**—Restricted to STEP elementary teacher candidates in the BCLAD program. Theories, research, and methods related to instruction of Spanish-English bilingual children, grades K-8. Approaches to dual language instruction, and pedagogical and curricular strategies for the instruction of reading, language arts, science, history, social science, and math in Spanish. Assessment issues and practices with bilingual students. In Spanish.

*1-3 units, Aut (Staff)*

**EDUC 265. History of Higher Education in the U.S.**—(Undergraduates register for 165.) Major periods of evolution, particularly since the mid-19th century. Premise: insights into contemporary higher education can be obtained through its antecedents, particularly regarding issues of governance, mission, access, curriculum, and the changing organization of colleges and universities. (SSPEP/APA)

*3-4 units, Win (Williamson, J)*

**EDUC 266X. Workshop in Practical Quantitative Research on Educational Policy and Inequality**—Conceptual and technical skills for analyzing data concerning educational policy and inequality. How to design analytic strategies using available data sources. Interpreting and presenting results. Prerequisite: 250A.

*3 units, not given this year*

**EDUC 267A. Curriculum and Instruction in Science**—Possible objectives of secondary science teaching and related methods: selection and organization of content and instructional materials; lab and demonstration techniques; evaluation, tests; curricular changes; ties with other subject areas. Prerequisite: STEP student or consent of instructor. (STEP)

**A:** 2 units, *Sum (Brown, B; Lythcott, J)*

**B:** 3 units, *Aut (Lythcott, J)*

**C:** 3 units, *Win (Lythcott, J)*

**EDUC 267E. Development of Scientific Reasoning and Knowledge**—For STEP elementary teacher candidates. Theories and methods of teaching and learning science. How to develop curricula and criteria for critiquing curricula. Students design a science curriculum plan for a real setting. State and national science frameworks and content standards. Alternative teaching approaches; how to select approaches that are compatible with learner experience and lesson objectives. Focus is on the linguistic and cultural diversity of California public school students.

*3 units, Spr (Staff)*

**EDUC 268A. Curriculum and Instruction in History and Social Science**—The methodology of history instruction: teaching for historical thinking and reasoning; linking the goals of teaching history with literacy; curriculum trends; and opportunities to develop teaching and resource units. Prerequisite: STEP student.

**A:** 2 units, *Sum (Wineburg, S)*

**B:** 3 units, *Aut (Fogo, B; Martin, D; Reisman, A)*

**C:** 3 units, *Win (Fogo, B; Reisman, A)*

**EDUC 269. Analysis of Teaching**—Student learning and the epistemology of school subjects as related to the planning and implementation of teaching, analysis of curriculum, and evaluation of performance and understanding. Readings and activities are coordinated with student teaching activities of participants. Prerequisite: STEP student or consent of instructor.

*3 units, not given this year*

**EDUC 270A. Learning to Lead in Public Service Organizations**—For Haas Center student service organization leaders.

*3-5 units, Spr (Davis, S)*

**EDUC 271S. School-Based Strategies for Reform and Redesign**—Seminar. Major redesign and reform strategies that schools are using to improve their performance. Preparation of a report for local school leaders analyzing school improvement resources and strategies.

*3-5 units, not given this year*

**EDUC 273. Gender and Higher Education**—Focus is on the U.S. The effects of interactions between gender and the structures of higher education; policies seeking changes in those structures. Topics: undergraduate and graduate education, faculty field of specialization, rewards and career patterns, sexual harassment, and the development of feminist scholarship and pedagogy.

*4 units, not given this year*

**EDUC 276X. Educational Assessment**—Reliability, validity, bias, fairness, and properties of test scores. Uses of tests to monitor, manage, and reform instruction. Testing and competition, meritocracy, achievement gaps, and explanations for group differences.

*3 units, Win (Haertel, E)*

**EDUC 277. Education of Immigrant Students: Psychological Perspectives**—(For graduate students; see 177.) (SSPEP)

*4 units, Win (Padilla, A)*

**EDUC 278. Introduction to Issues in Evaluation**—Open to master's and doctoral students with priority to students from education. Focus is on the basic literature and major theoretical and practical issues in evaluation. Introduction to basic concepts and intellectual debates in the field: knowledge construction, purpose of evaluation, values in evaluation, knowledge utilization, professional standards of evaluation practice. Enrollment limited to 18. (SSPEP)

*3 units, Win (Phillips, D)*

**EDUC 279. Urban Youth and Their Institutions: Research and Practice**—(For graduate students; see 179.) (SSPEP/APA)

*4-5 units, Aut (McLaughlin, M)*

**EDUC 284. Teaching and Learning in Heterogeneous Classrooms**—Teaching in academically and linguistically heterogeneous classrooms requires a repertoire of pedagogical strategies. Focus is on how to provide access to intellectually challenging curriculum and equal-status interaction for students in diverse classrooms. Emphasis is on group work and its cognitive, social, and linguistic benefits for students. How to prepare for group work, equalize participation, and design learning tasks that support conceptual understanding, mastery of content and language growth. How to assess group products and individual contributions. (STEP)

*3 units, Win (Lotan, R)*

**EDUC 285X. Supporting Students with Special Needs**—For STEP teacher candidates. Needs of exceptional learners, identification of learning differences and disabilities, and adaptations in the regular inclusion classroom. Legal requirements of special education, testing procedures, development of individualized education plans, and support systems and services. Students follow a special needs learner to understand diagnosis, student needs, and types of services.

*1-3 units, Spr (Fur, E)*

**EDUC 288X. Organizational Behavior and Analysis**—(Same as SOC 366.) Principles of organizational behavior and analysis; theories of group and individual behavior; organizational culture; and applications to school organization and design. Case studies.

*4 units, Aut (McFarland, D)*

**EDUC 290. Leadership: Research, Policy, and Practice**—Concepts of leadership that include the classroom, school, district office, and state capitol. The role of complexity; organizational leaders outside of schools past and present, and how that complexity permitted leadership to arise. Case studies. (SSPEP/APA)

4 units, Win (Davis, S)

**EDUC 291. Learning Sciences and Technology Design Research Seminar and Colloquium**—Students and faculty present and critique new and original research relevant to the Learning Sciences and Technology Design doctoral program. Goal is to develop a community of scholars who become familiar with each other's work. Practice of the arts of presentation and scholarly dialogue while introducing seminal issues and fundamental works in the field.

1-3 units, Aut (Pea, R), Win (Schwartz, D)

**EDUC 293X. American Philosophy of Education**—A century of classical writers in American philosophy, focusing on work on education, democracy, learning, and culture. Texts by Emerson, Peirce, James, Dewey, and Mead.

3-4 units, Win (Callan, E; McDermott, R)

**EDUC 295. Learning and Cognition in Activity**—(Same as PSYCH 261A.) Methods and results of research on learning, understanding, reasoning, problem solving, and remembering, as aspects of participation in social organized activity. Principles of coordination that support cognitive achievements and learning in activity settings in work and school environments.

3 units, Win (Pea, R)

**EDUC 298. Online Communities of Learning**—Historical foundations, theoretical perspectives, underlying learning theories, case studies, and enabling technologies of online learning communities across and within K-12 schools, among teachers, in professional collaborations in the sciences, and across informal communities of interest in society.

3 units, Spr (Pea, R)

**EDUC 301B. Theoretical Debates in the History of Education**—How should we educate students? To what purpose should students be educated? What is the purpose of education in America? What is an appropriate curriculum? Do all students deserve or need the same curriculum?

3-4 units, Aut (Williamson, J)

**EDUC 303X. Designing Learning Spaces**—Project-based. How space shapes personal interactions and affords learning opportunities in formal and informal settings. How to integrate learning principles into the design of spaces and develop a rubric to assess the impact on learning.

3-4 units, not given this year

**EDUC 304. The Philosophical and Educational Thought of John Dewey**—(Same as PHIL 242.) Dewey's pragmatic philosophy and educational thought; his debt to Darwin, Hegel, Peirce, and James; his educational writings including *Democracy and Education*; and his call for a revolution in philosophy in *Reconstruction in Philosophy*. (SSPEP)

4 units, Aut (Phillips, D)

**EDUC 306A. Education and Economic Development**—Case material considers development problems in the U.S. and abroad. Discussion sections on economic aspects of educational development. (SSPEP/ICE)

5 units, Aut (Carnoy, M)

**EDUC 306B. Politics, Policy Making, and Schooling Around the World**—Education policy, politics, and development. Topics include: politics, interests, institutions, policy, and civil society; how schools and school systems operate as political systems; how policy making occurs in educational systems; and theories of development.

3-4 units, Spr (Adams, J)

**EDUC 306C. Political Economy of the Mind**—Theories of political economy related to theories of the learning mind, emphasizing theories of genius. Readings from Pascal, Defoe, Smith, Balzac, Emerson, Marx, Veblen, Joyce, and Morrison. (SSPEP)

3-4 units, not given this year

**EDUC 306D. World, Societal, and Educational Change: Comparative Perspectives**—(Undergraduates register for 136; same as SOC 231.) Theoretical perspectives and empirical studies on the structural and cultural sources of educational expansion and differentiation, and on the cultural and structural consequences of educational institutionalization. Research topics: education and nation building; education, mobility, and equality; education, international organizations, and world culture.

4-5 units, Win (Wotipka, C)

**EDUC 306Y. Economic Support Seminar for Education and Economic Development**—Core economic concepts that address issues in education in developing and developed countries. Supply and demand, elasticity, discount rates, rate of return analysis, utility functions, and production functions. Corequisite: 306A.

1 unit, Aut (Carnoy, M)

**EDUC 307B. The Politics of International Cooperation in Education**—(Undergraduates and master's students register for 107.) Analysis of policies and practices in international cooperation, assistance, and exchange. The role of international organizations (World Bank, UNESCO, OECD) and the politics of multilateral and bilateral assistance programs. (SSPEP/ICE, APA)

3-4 units, not given this year

**EDUC 307X. Organizing for Diversity: Opportunities and Obstacles in Groups and Organizations**—Obstacles in organizations and groups that prevent people from participating, working effectively, and developing relationships in the context of diversity. How to create conditions in which diversity enhances learning and effectiveness? Experiential exercises; students experiment with conceptual and analytic skills inside and outside of the classroom.

3-4 units, Spr (Meyerson, D)

**EDUC 309X. Educational Issues in Contemporary China**—Reforms such as the decentralization of school finance, emergence of private schools, expansion of higher education, and reframing of educational policy to focus on issues of quality. Have these reforms exacerbated educational inequality?

3-4 units, Spr (Adams, J)

**EDUC 310. Sociology of Education: The Social Organization of Schools**—(For graduate students; see 110; same as SOC 132/332.) Topics and case studies that elaborate on the embeddedness of classrooms and schools in social environments, spanning school processes such as stratification, authority, moral and technical specialization, curricular differentiation, classroom instruction, voluntary associations, social crowds, and peer influence. (SSPEP)

4 units, Win (McFarland, D)

**EDUC 311X. First-Year Doctoral Seminar: Introduction to Research**—Methods in current educational research focusing on logical and epistemological, design, and ethical issues. May be repeated for credit. (all areas)

2-3 units, Win, Spr (Stipek, D; Labaree, D)

**EDUC 314. Workshop in Economics of Education**—Research by students and faculty engaged in problems in the economics of education. Prerequisites: advanced graduate training in economics theory and methodology; current ongoing research. May be repeated for credit. (SSPEP)

1-2 units, not given this year

**EDUC 315X. Issues in Science Education for Science Graduate Students**—Recurring themes in debates about science education: why should science be taught in schools; what science should be taught; how and to whom; do schools present an accurate picture of science, and should they; how much do science teachers need to know; how do they know what students are learning; what is the role of scientists?

1-3 units, not given this year

**EDUC 320X. Social Justice in Education**—Recent work in political theory that addresses questions about social justice in educational policy and practice: equality in education, language rights, race and multiculturalism, educational choice.

3 units, Win (Callan, E)

**EDUC 321A. Emerging Conceptions of Qualitative and Ethnographic Research**—Issues of knowing via forms through which human beings have historically represented the world and how they care about it, including narrative, visual images, and poetry. How to see and represent the educational worlds. Sources include videotaped classrooms in action, film excerpts that reveal human relations, and literary forms that describe classroom situations. Materials and procedures used by researchers, film makers, and fiction writers.

4-5 units, not given this year

**EDUC 321X. Leading Social Change: Cases in Educational and Social Entrepreneurship**—(Same as GSBGEN 385.) Approaches to initiating and sustaining change in social sectors such as education. Challenges of effecting change, maintaining support, and gauging effectiveness of change efforts in the social sector. Case studies. Guest lecturers.

4 units, Win (Meyerson, D)

**EDUC 322X. Discourse of Liberation and Equity in Schools and Society**—Issues and strategies for studying oral and written discourse as a means for understanding classrooms, students, and teachers, and teaching and learning in educational contexts. The forms and functions of oral and written language in the classroom, emphasizing teacher-student and peer interaction, and student-produced texts. Individual projects utilize discourse analytic techniques. Prerequisite: graduate status or consent of instructor. (SSPEP)

3-5 units, Win (Ball, A)

**EDUC 323A. Introduction to Education Policy Analysis**—The formulation and improvement of federal and state education and children policies. Key current policy issues and trends in politics. Topics: the federal role in education and child care. (SSPEP)

3 units, Spr (Loeb, S)

**EDUC 326. Legal Dilemmas and Administrative Decision Making in Schools**—Concepts and issues in school law and their influence on administrative decision making in public schools, skills in the application of legally defensible resolutions to complex educational problems, and theories, principles, and the evolution of education law.

4 units, Aut (Davis, S)

**EDUC 327A,B,C. The Conduct of Qualitative Inquiry**—Three quarter sequence for doctoral students to engage in research that anticipates, is a pilot study for, or feeds into their dissertations. Prior approval for dissertation study not required. Students engage in common research processes including: developing interview questions; interviewing; coding, analyzing, and interpreting data; theorizing; and writing up results. Participant observation as needed. Preference to students who intend to enroll for both quarters.

A: 3-4 units, not given this year

B: 1-3 units, not given this year

C: 1-4 units, not given this year

**EDUC 328X. Topics in Learning and Technology: Interactivity**—Content changes each year. Interactivity including manipulation of an object, talking to another person, or clicking on a mouse. Proposals for the active learning ingredient of interactivity, and how different technologies capitalize on these ingredients.

3 units, not given this year

**EDUC 331A. Introduction to Research Design in Administration and Policy Analysis**—Required for first-year APA doctoral students; SSPEP first-year doctoral students with consent of instructor. How to conduct literature reviews. How to use literature to frame and formulate problem statements, research questions, and conceptual frameworks. (APA)

3-5 units, not given this year

**EDUC 333A. Learning, Design and Technology: Analyzing Functions and Needs in Learning Environments**—Advanced seminar. Theoretical approaches to learning used to analyze learning environments and develop goals for designing resources and activities to support effective learning practices.

3 units, Aut (Perez-Granados, D)

**EDUC 336X. Language, Identity, and Classroom Learning**—As contemporary research focuses on how people act and recognize each other, analyzing interaction while acknowledging identity allows for a dynamic examination of cultural interaction. Broad cultural categorization can be overly expansive in identifying the characteristics of large groups of individuals.

1-3 units, Aut (Brown, B)

**EDUC 337. Race, Ethnicity, and Linguistic Diversity in Classrooms: Sociocultural Theory and Practices**—(For graduate students; see 103B.)

3-4 units, Win (Ball, A)

**EDUC 339X. Advanced Topics in Quantitative Policy Analysis**—For doctoral students. How to develop a researchable question and research design, identify data sources, construct conceptual frameworks, and interpret empirical results. Presentation by student participants and scholars in the field. May be repeated for credit.

1-2 units, Aut, Win, Spr (Loeb, S)

**EDUC 340. Psychology and American Indian Mental Health**—Western medicine's definition of health as the absence of sickness, disease, or pathology; Native American cultures' definition of health as the beauty of physical, spiritual, emotional, and social things, and sickness as something out of balance. Topics include: historical trauma; spirituality and healing; cultural identity; values and acculturation; and individual, school, and community-based interventions. Prerequisite: experience working with American Indian communities.

3-5 units, Spr (LaFromboise, T)

**EDUC 342. Child Development and New Technologies**—Focus is on the experiences computing technologies afford children and how these experiences might influence development. Sociocultural theories of development as a conceptual framework for understanding how computing technologies interact with the social ecology of the child and how children actively use technology to meet their own goals. Emphasis is on influences of interactive technology on cognitive development, identity, and social development equity.

3-4 units, Spr (Barron, B; Perez-Granados, D)

**EDUC 346. Research Seminar in Higher Education**—Required for higher education students. Major issues, current structural features of the system, the historical context that shaped it, and theoretical frameworks. The purposes of higher education in light of interest groups including students, faculty, administrators, and external constituents. Issues such as diversity, stratification, decentralization, and changes that cut across these groups. (APA)

4 units, Aut (Antonio, A)

**EDUC 347. Economics of Higher Education**—(Same as GSBGEN 348.) Topics: the worth of college and graduate degrees, and the utilization of highly educated graduates; faculty labor markets, careers, and workload; costs and pricing; discounting, merit aid, and access to higher education; sponsored research; academic medical centers; and technology and productivity. Emphasis is on theoretical frameworks, policy matters, and the concept of higher education as a public good. Stratification by gender, race, and social class.

4 units, Spr (Strober, M)

**EDUC 348X. Comparative Higher Education**—Seminar. For students interested in higher, international, or comparative education. Comparative work on the politics of change in higher education. Emphasis is on reform projects in governance, financing, and curriculum. Internal and external political dynamics that facilitate or hinder change.

3 units, Aut (Lenhardt, G)

**EDUC 349X. Accountability and Assessment in Higher Education**—Organizational report cards and accountability mechanisms: demand for and problems with them. Report cards as policy instruments; how they address information asymmetries; as alternatives to direct regulation; and current policy conditions that support them such as education standards and reform. Politics including interested audiences and organizational responses. An attempt to redesign an education report card.

3 units, not given this year

**EDUC 350A,B,C. Research Practicum in Psychological Studies in Education**—Required of first-year doctoral students in Psychological Studies; others by consent of instructor. Introduction to the doctoral program in Psychological Studies in Education and to faculty and student research. (PSE)

**A:** 2 units, Aut (Barron, B)

**B:** 2-3 units, Win (Barron, B)

**C:** 1-2 units, Spr (Barron, B)

**EDUC 351A. Design and Analysis of Longitudinal Research**—The analysis of longitudinal data as central to empirical research on learning and development. Topics: growth models, measurement of change, reciprocal effects, stability, analysis of durations including survival analysis, and experimental and non-experimental group comparisons. See <http://www.stanford.edu/~rag/>. Prerequisite: statistics at the level of 257. (PSE)

3 units, not given this year

**EDUC 353A. Problems in Measurement: Item Response Theory**—Alternative mathematical models used in test construction, analysis, and equating. Emphasis is on applications of item response theory (latent trait theory) to measurement problems, including estimation of item parameters and person abilities, test construction and scoring, tailored testing, mastery testing, vertical and horizontal test equating, and detection of item bias. Prerequisites: 252 and 257, or PSYCH 248 and 252, or equivalent. (PSE)

3 units, alternate years, not given this year

**EDUC 353C. Problems in Measurement: Generalizability Theory**—Application to analysis of educational achievement data, including performance assessments. Fundamental concepts, computer programs, and actual applications. (PSE)

3 units, Spr (Shavelson, R; Haertel, E)

**EDUC 354X. School-Based Decision Making**—Leadership and organizational issues. Emphasis is on building capacity for individual schools to make decisions, establishment of an inquiry process at the school level, use and availability of information, implementation and evaluation of decisions, parental involvement, and support of school-based decisions by districts. (SSPEP/APA)

4 units, Win (Davis, S)

**EDUC 359C. Research in Science Education: Nature of Science and Science Epistemology**—The changing debate over conceptions of the nature of science and the calls to broaden it. Themes, directions, limitations, and epistemological foundations of the body of research on the nature of science.

2-3 units, Win (Brown, B)

**EDUC 359E. Research on Mathematics Education**—Comparative and cultural perspectives on mathematics teaching and learning practices in the U.S. Mathematics education in the context of cultural and educational systems.

2-4 units, Aut (Murata, A)

**EDUC 363X. Research and Practice on Organizing Urban Schools for Improvement**—(Same as OB 367.) For masters' and doctoral students in Education and GSB. Empirical research on urban school reform efforts, theoretical frameworks on student and adult learning, the sociology of work in schools, and social organization theory. How community context affects instructional coherence. Dynamics between school professionals and with parents. Authentic instruction and its effects. Case studies on reform implementation.

4 units, Spr (Bryk, A)

**EDUC 364. Cognition and Learning**—Cognitive psychology, the study of human thought. Topics include the nature of expertise, creativity, and memory. Emphasis is on learning. The role of cognitive psychology in helping people learn, and determining the most desirable type of learning and whether people have learned. Students design and conduct their own learning study.

3-4 units, Win (Schwartz, D)

**EDUC 365. Social, Emotional, and Personality Development**—Limited to doctoral students in PSE and those with a background in child and adolescent development. Developmental processes that account for psychological adaptation in social relationships, schools, and other interpersonal settings. Theoretical models of social, personality, and emotional development. Topics such as self-concept, empathy, motivation, aggression, and personality formation.

3 units, Aut (Damon, W)

**EDUC 367. Cultural Psychology**—(Formerly 292.) The relationship between culture and psychological processes; how culture becomes an integral part of cognitive, social, and moral development. Both historical and contemporary treatments of cultural psychology, including deficit models, crosscultural psychology, ecological niches, culturally specific versus universal development, sociocultural frameworks, and minority child development. The role of race and power in research on cultural psychology.

3 units, Spr (Nasir, N)

**EDUC 368. Cognitive Development in Childhood and Adolescence**—Traditional and current research in cognitive development: changes within the individual from infancy through adolescence. Theoretical and empirical perspectives on research processes that explain developmental changes affecting how a human being thinks about and experiences the world.

3-4 units, Spr (Barron, B; Perez-Granados, D)

**EDUC 369. Human Cognitive Abilities**—(Formerly 255; same as PSYCH 133.) Psychological theory and research on human cognitive abilities; their nature, development, and measurement; and their importance in society. Persistent controversies and new areas of research, recent perspectives on the nature-nurture debate and the roles of genetics, health and education in shaping HCAs. Prerequisite: PSYCH 1 or equivalent. (PSE)

3-4 units, Win (Shavelson, R)

**EDUC 374A. Research Workshop: Philanthropy and Civil Society**—(Same as SOC 374A.) Seminar. Open to Ph.D. students and undergraduates writing honors theses. Activities and institutions that define civil society, emphasizing the interactions between funding sources and nonprofit organizations. May be repeated for credit.

**A:** 1-3 units, Aut (Powell, W)

**B:** 2-3 units, Win (Powell, W)

**C:** 2-3 units, Spr (Powell, W)

**EDUC 375A. Seminar on Organizational Theory**—(Same as SOC 363A.) The social science literature on organizations assessed through consideration of the major theoretical traditions and lines of research predominant in the field.

5 units, Aut (Powell, W)

**EDUC 375B. Seminar on Organizations: Institutional Analysis**—(Same as SOC 363B.) Seminar. Key lines of inquiry on organizational change, emphasizing network, institutional, and evolutionary arguments.

3-5 units, Win (Powell, W)

**EDUC 376. State Theory and Educational Policy**—The relationship between political system structures and educational change by analyzing theories and interpretations of how political systems function, and the implications of these theories for understanding education. Classical and Marxist interpretations. (SSPEP/ICE)

4 units, not given this year

**EDUC 377. Comparing Institutional Forms: Public, Private, and Nonprofit**—(Same as GSBGEN 346.) Seminar. For students interested in the nonprofit sector, and those in the joint Business and Education program. The missions, functions, and capabilities of nonprofit, public, and private organizations. Focus is on sectors with significant competition among institutional forms, including health care, social services, the arts, and education. Sources include scholarly articles, cases, and historical materials. Advanced undergraduates may enroll with consent of instructor.

4 units, Win (Powell, W)

**EDUC 377B. Strategic Management of Nonprofits**—(Same as STRAMGT 368.) Strategic, governance, and management issues facing nonprofit organizations and their leaders in the era of venture philanthropy and social entrepreneurship. Development and fundraising, investment management, performance management, and nonprofit finance. Case studies include smaller, social entrepreneurial and larger, more traditional organizations, including education, social service, environment, health care, religion, NGOs, and performing arts.

4 units, Win (Meehan, W)

**EDUC 377C. Strategic Issues in Philanthropy**—(Same as GSBGEN 381.) Operational and strategic distinctions between traditional philanthropic entities, such as community, private, and corporate foundations, and contemporary models, such as funding intermediaries and venture philanthropy partnerships. Philanthropic strategies as they relate to foundation mission, grant making, evaluation, financial management, infrastructure, and board governance. Guest speakers.

4 units, Spr (Arrillaga, L)

**EDUC 377D. Strategic Leadership of Nonprofits**—(Same as STRAMGT 378.) Formulating, evaluating, and implementing mission and strategy. Case studies from nonprofits in social services, health care, education, and arts and culture. The interaction of strategy and mission, industry structure and evolution, strategic change, growth and replication, corporate strategy, governance, commercialization, alliances, capacity building, and leadership.

4 units, Aut (Phills)

**EDUC 378X. Seminar on Social Change Processes and Organizations**—Theories of social change and influence processes within and through organizations. Social change organizations. The interaction of philanthropic institutions and other social change organizations within civil society. Meso-level theories of change.

3-4 units, Win (Meyerson, D)

**EDUC 380. Internship in Educational Administration**

1-15 units, Aut, Win, Spr, Sum (Staff)

**EDUC 382. Student Development and the Study of College Impact**—The philosophies, theories, and methods that undergird most research in higher education. How college affects students. Student development theories, models of college impact, and issues surrounding data collection, national databases, and secondary data analysis.

4 units, Spr (Antonio, A)

**EDUC 384. Advanced Topics in Higher Education**—Topics vary each year and may include faculty development, legal issues, curricular change, knowledge production, professional socialization, management of organizational decline, leadership and innovation, authority and power, diversity and equity, and interactions with government and industry. May be repeated for credit. Prerequisites: 346, consent of instructor. (APA)

3-5 units, not given this year

**EDUC 387A,B,C. Workshop: Comparative Studies of Educational and Political Systems**—(Same as SOC 311A,B,C.) Analysis of quantitative and longitudinal data on national educational systems and political structures. May be repeated for credit. Prerequisite: consent of instructor. (SSPEP/ICE)

A: 1-5 units, Aut (Wotipka, C)

B: 1-5 units, Win (Wotipka, C)

C: 1-5 units, Spr (Wotipka, C)

**EDUC 388A. Language Policies and Practices**—For credential candidates and STEP candidates seeking to meet requirements for the English Learner Authorization on their preliminary credential. Historical, political and legal foundations of education programs for English learners. Theories of second language learning, and research on the effectiveness of bilingual education. Theory-based methods to facilitate and measure English learners' growth in language and literacy acquisition, and create environments which promote English language development and content area learning through specially designed academic instruction in English. (STEP)

3-4 units, Win (Hakuta, K)

**EDUC 391X. Web-Based Technologies in Teaching and Learning**—Project-based. Overview of instructional design theories and educational technologies to evaluate and develop a web-based educational application or system. Web-based applications and technologies designed for online interactions and collaborations. Instructional systems strategies to develop online environments that support and facilitate interactive learning. Students create a small-scale, web-based learning system.

3 units, Aut (Kim, H)

**EDUC 393. Proseminar on Research in Education**—Overview of the field of education for joint degree (M.B.A./M.A.) students. (SSPEP)

4 units, Spr (Strober, M)

**EDUC 395X. Scholarly Writing in Education and the Social Sciences**—Focus is on producing articles for scholarly journals in education and the social sciences. Ethics and craft of scholarly publishing. Writing opinion articles for lay audiences on issues of educational and social import.

3-5 units, Spr (Wineburg, S)

**EDUC 401A. Mini Courses in Methodology: Statistical Packages for the Social Sciences**—Statistical analysis using SPSS, including generating descriptive statistics, drawing graphs, calculating correlation coefficients, conducting t-tests, analysis of variance, and linear regression. Building up datasets, preparing datasets for analysis, conducting statistical analysis, and interpreting results.

1 unit, Aut, Win (Yuan, K)

**EDUC 401B. Mini Courses in Methodology: Stata**—The computer as research tool. Statistical software Stata for data analysis, including t-tests, correlation, ANOVA, and multivariate linear regression.

1 unit, Aut, Win (Gatlin, S)

**EDUC 402. Research Workshop on Gender Issues**—Presentations of research on gender issues by doctoral students, faculty, and visitors. May be repeated for credit. Prerequisite: consent of instructor; doctoral student.

1 unit, not given this year

**EDUC 408. Research Workshop in International and Comparative Education**—Limited to advanced doctoral students in ICE and SSPEP. Research workshop for the review of key issues in the methodology and epistemology of social research in education, research proposals, and findings by students and faculty. Prerequisites: 306A,B,C,D or equivalents. (SSPEP/ICE)

2-5 units, Win (Carnoy, M)

**EDUC 417X. Research and Policy on Postsecondary Access**—(Same as EDUC 117X.) The transition from high school to college. K-16 course focusing on high school preparation, college choice, remediation, pathways to college, and first-year adjustment. The role of educational policy in postsecondary access.

3 units, Win (Antonio, A)

**EDUC 418. Foundations of Case Study Research**—Rationales for case study research in academic organizations emphasizing colleges and universities; high schools and related organizational contexts. Methodological training in fieldwork through hands-on data collection and analysis from interviews and documents. For doctoral students developing qualifying papers or dissertation proposals; required for higher education doctoral students; APA, SSE, and C&TE students with consent of instructor. (APA)

3-5 units, Spr (Gumport, P)

**EDUC 423A. Introduction to Research Design: Educational Administration and Policy Analysis**—Preference to APA doctoral students working on their sixth-quarter qualifying paper. Issues in conceptualizing and designing research in the social sciences. (APA)

*3-5 units, Win (Carnoy, M)*

**EDUC 424. Introduction to Research in Curriculum and Teacher Education**—Limited to second-year doctoral students in CTE. How to conceptualize, design, and interpret research. How to read, interpret, and critique research; formulate meaningful research questions; evaluate and conduct a literature review; and conceptualize a study. Readings include studies from different research paradigms. Required literature review in an area students expect to explore for their qualifying paper.

*3-5 units, Aut (Darling-Hammond, L)*

**EDUC 453. Doctoral Dissertation**—For doctoral students only. (all areas)

*1-15 units, Aut, Win, Spr, Sum (Staff)*

**EDUC 465. Seminar in the Pedagogy of Teacher Education**—For doctoral students interested in working in teacher education. Pedagogical approaches, including the use of modeling, simulations, and hypermedia materials. Theoretical considerations of how teachers learn to teach.

*2-3 units, not given this year*

**EDUC 470. Practicum**—For advanced graduate students. (all areas)

*1-15 units, Aut, Win, Spr, Sum (Staff)*

**EDUC 480. Directed Reading**—For advanced graduate students. (all areas)

*1-15 units, Aut, Win, Spr, Sum (Staff)*

**EDUC 490. Directed Research**—For advanced graduate students. (all areas)

*1-15 units, Aut, Win, Spr, Sum (Staff)*

**EDUC 493B. Topics in Quantitative Methods: Meta-Analysis**—(Same as STATS 211.) Meta-analysis as a quantitative method for combining the results of independent studies enabling researchers to evaluate available evidence. Examples of meta-analysis in medicine, education, and social and behavioral sciences. Statistical methods include nonparametric methods, contingency tables, regression and analysis of variance, and Bayesian methods. Project involving an existing published meta-analysis. Prerequisite: basic sequence in statistics.

*1-3 units, Win (Olkin, I)*

**EDUC 496. Research in History and Social Science Education**—For doctoral students. Literature on historical learning and teaching and corresponding social sciences research designs, assessment, and curriculum evaluation.

*3-5 units, Aut (Wineburg, S)*