SCHOOL OF EDUCATION

Emeriti: (Professors), J. Myron Atkin, John Baugh, Edwin M. Bridges, Robert C. Calfee, Larry Cuban, Nathaniel L. Gage, James Greeno, Michael W. Kirst, Henry M. Levin, Richard Lyman (President emeritus), James G. March, William F. Massy, Nel Noddings, Ingram Olkin, Thomas Rohlen, Lee S. Shulman, George D. Spindler, Carl E. Thoresen, David B. Tyack, Hans Weiler

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Professors: Anthony Bryk, Eamonn Callan, Martin Carnoy, William Damon, Linda Darling-Hammond, Elliot W. Eisner, Pamela Grossman, Patricia J. Gumport, Edward Haertel, Connie Juel, John D. Krumboltz, David Labaree, Raymond P. McDermott, Milbrey McLaughlin, Amado M. Padilla, Roy Pea, Denis C. Phillips, Walter Powell, Francisco O. Ramirez, Richard J. Shavelson, Deborah J. Stipek, Myra H. Strober, Guadalupe Valdés, Decker F. Walker, Sam Wineburg

Associate Professors: Anthony L. Antonio, Arnetha Ball, Brigid J. Barron, Joanne T. Boaler, Teresa C. LaFromboise, Susanna Loeb, Debra Meyerson, Sean Reardon, David Rogosa, Daniel Schwartz

Assistant Professors: Jennifer Adams, Bryan Brown, Daniel McFarland, Deanne R. Perez-Granados, Aki Murata, Na'ilah Suad Nasir, Joy Williamson

Associate Professors (Teaching): Stephen Davis, Shelley Goldman, Rachel Lotan

Lecturers: Denise Pope, Ann Porteus, Laura Post

Courtesy Professors: Carol Dweck, Eric Hanushek, Shirley Heath, John Kennedy, John Rickford

Courtesy Assistant Professor: Robert Reich

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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 does offer 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 subspecialties or 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:

99X. The Undergraduate Community Internship Practicum

102. Culture, Class and Educational Opportunity

103A. Exploring Elementary Teaching Junior Seminar

106. Interactive Media in Education

107. The Politics of International Cooperation in Education

110. Sociology of Education: The Social Organization of Schools

111. The Young Adult Novel: A Literature for and about Adolescents

124. Collaborative Design and Research of Technology: Integrated Curriculum

130. Introduction to Counseling

131. Mediation for Dispute Resolution

134. Career and Personal Counseling

135X. Race, Ethnicity, and Linguistic Diversity in Teacher Preparation

138Q. Educational Testing in American Society

149. Theory and Issues in the Study of Bilingualism

155. Development of Measuring Instruments

156A. Understanding Racial and Ethnic Identity

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. Peer Counseling: Bridge Community

196. Feminist Theories of Work and Family

197. Education and the Status of Women: Comparative Perspective

199. 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

232C. Introduction to Learning

243. Writing Across Languages and Cultures: Research on Writing and Writing Instruction

247. Moral Education

250B. Statistical Analysis in Educational Research: Analysis of Variance

255. Human Abilities

270A. Learning to Lead in Public Service Organizations

290. Leadership: Research, Policy, and Practice

294. Theories of Human Development

298. Online Learning Communities

304. The Philosophical and Educational Thought of John Dewey

305X. Progressive Education, the Free Child, and the Critics

306D. World, Societal, and Educational Change: Comparative Perspectives

- 312A. Traditions of Microsociology
- 312B. Contemporary Microsociology
- 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
- 356X. Memory, History, and Education
- 359A. Research in Science and Math Education: Assessment and Evaluation
- 370X. Theories of Cognitive Development
- 371X. Cognitive Development in Childhood and Adolescence
- 374A. Research Workshop: Knowledge Networks
- 377. Organization and Style in Research Reports Comparing Institutional Forms
- 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 and able 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 on the web 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:

- Educational policy and history in the U.S.: courses include American Education and Public Policy; History of Education in the United States; Children, Civil Rights, and Public Policy in the U.S.; Introduction to the Study of International Comparative Education; History of Higher Education in the U.S.
- Contemporary problem areas: courses include Urban Youth and their Institutions: Research and Practice; Theory and Issues in the Study of Bilingualism; Education and the Status of Women: Comparative Perspectives; Contemporary Social Issues in Child and Adolescent Development.
- Foundational disciplines: courses include Social Sciences and Educational Analysis; Problems in Sociology of Education; Problems of Intelligence, Information, and Learning; 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 or ally 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/publications/#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, Old Union, 520 Lasuen Mall, Stanford, CA 94305-3005, or at http://ed.stanford.edu/suse. The admissions packet includes the publication *School of Education Guide to Graduate Studies*, which outlines degrees, programs, admission and graduation requirements, and research interests of the faculty. All 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.

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/suse and in the School of Education Guide to Graduate Studies. 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/Social Science Education. 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.

In addition, an M.A. degree with a teaching credential is offered in the Stanford Teacher Education Program (Cross-Area—STEP).

STANFORD TEACHER EDUCATION PROGRAM (STEP)

STEP offers two Master of Arts programs to prepare college graduates for careers as teachers in secondary schools and in elementary schools. 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 K-8 schools. To be successful in classrooms with diverse

^{*} This program in CTE is not a credentialing program; for the latter, see STEP below.

students, STEP helps participants become more aware of their values, more flexible in their teaching and learning styles, and more knowledgeable in their subject matter.

The 12-month STEP year begins in June (Secondary) or August (Elementary) with a Summer Quarter of intensive academic preparation and experience in a local summer school. During the academic year, students take courses in professional education and academic subjects; they also teach part-time in elementary, middle or high schools for the entire public school year. The master's degree and Teaching Credential require 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 Education study that concludes in a master's degree following the STEP student teaching year.

Applicants 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 CSET subject assessment test in their field, or (2) by completing a California state-approved subject matter preparation program.

Further information regarding admission requirements, course work, and credential requirements is available at http://ed.stanford.edu/suse 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 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 Policies and Guidelines*, available for download at http://ed.stanford.edu/suse/programs-degrees/degree-requirements.html.

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

Administration and Policy Analysis (SSPEP-APA) Anthropology of Education (SSPEP-SSE) Child and Adolescent Development (PSE) Economics of Education (SSPEP-SSE) Educational Linguistics (SSPEP-SSE) Educational Psychology (PSE) English Education/Literacy Studies (C&TE)

General Curriculum Studies (C&TE)

Higher Education (SSPEP-APA)

History of Education (SSPEP-SSE)

International Comparative Education (SSPEP-ICE)

Learning Sciences and Technology Design (CTE, PSE, SSPEP)

Mathematics Education (C&TE)

Philosophy of Education (SSPEP-SSE)

Science Education (C&TE)

Interdisciplinary Studies (SSPEP-SSE)

History/Social Science Education (C&TE)

Sociology of Education (SSPEP-SSE)

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, researchers, and specialists 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.

3-5 units, Aut (Davis)

EDUC 95Q. Exploring School Reforms—Stanford Introductory Seminar. Preference to sophomores considering careers in education and who want to combine this course with fieldwork or school visits. Case studies of school reform and issues of continuity and change in education. Topics: origins, outcomes, and explanations of social movements that have worked for social justice in education; the balance of social diversity and shared political values; the assessment of success in education reform; the meanings of progressive and traditional in teaching and learning, and their relationship to the No Child Left Behind law.

2 units, Win (Tyack)

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

1 unit, Aut (McConnell)

EDUC 99X. The Undergraduate Community Internship Practicum—Goal is to provide undergraduates with understanding of the environments and contexts of school-age youth and their families. Students, primarily juniors in the STEP Coterminal Teaching Program engaged in approved community-based internships, discuss the nature of community and how community dynamics affect youth and their families, students' relationships to school, and academic achievement.

1-2 units (Stout) not given 2005-06

EDUC 101X. 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 (Staff)

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)

4 units (Staff) not given 2005-06

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 units, Aut (Juel)

EDUC 103B. Race, Ethnicity, and Linguistic Diversity in Classrooms: Sociocultural Theory and Practices—(Graduate students register for 337X.) 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 units, Win (Ball)

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 units, Spr (Padilla)

EDUC 106. Interactive Media in Education—Workshop. (CTE) *3-5 units, Aut (Walker)*

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, Win (Staff)

EDUC 108X. Case Studies from the History of Science—Case studies, primarily from the histories of chemistry, geology, and biology, inform the practice of secondary science teaching, primarily for co-terminal students.

2 units (Lythcott) not given 2005-06

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, Spr (McFarland)

EDUC 111. The Young Adult Novel: A Literature For and About Adolescents—For undergraduates considering teaching or working with adolescents, and for those planning to apply to the coterminal program in the Stanford Teacher Education program (STEP). Students work together to define the genre of young adult novels. What they reveal about adolescence in America. How to read and teach young adult literature.

5 units (Grossman) not given 2005-06

EDUC 111B. The Teaching of Shakespeare—Relationships between teenagers and Shakespeare's plays; challenges for adolescents and their teachers. Contributions from drama, English, and education. Students design and perform workshops for real teen audiences. Neither acting experience nor knowledge of Shakespearean literature required.

3 units (Wolf) not given 2005-06

EDUC 114N. Linguistic Foundations of Racial Strife in Schools and Society: Global Perspectives—Stanford Introductory Seminar. Preference to sophomores. Linguistic diversity in the U.S. and elsewhere, focusing on racial strife in schools and their surrounding societies. Topics include: colonization, the displacement of Native Americans, slavery, immigrant groups, the growth of public education, and other social movements. Comparable controversies in other countries including racial conflicts in England. Debates about affirmative action and controversies surrounding Ebonics and bilingual education. Web page for student work.

3 units (Baugh) not given 2005-06

EDUC 115N. 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 (Nasir) not given 2005-06

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)

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 (Antonio) not given 2005-06

EDUC 118X. Community-Based Research on Youth Development—

Training seminar for students engaged in community-based research. Topics include: theoretical perspectives on youth development, survey and interview protocol development, quantitative and qualitative data collection methods, and data analysis. Students conduct a research project in a Bay Area community, examining youth development at school, on the sports field, and in a leadership program. Final project may include a proposal for new study, literature review, or thesis chapter.

1-4 units (Strobel, Galloway) not given 2005-06

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 (Davis) not given 2005-06

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)

EDUC 130. Introduction to Counseling—The theories and techniques of counseling, emphasizing the 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, are supplemented with a third theory of each 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)

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)

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)

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

4-5 units, Win (Ramirez)

EDUC 140T. Technology and Literacy—Influences of computer technology on literacy and learning to read and write. The advantages and limits of text. Emerging technologies.

3 units (Kamil) not given 2005-06

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 (Barron, Perez-Granados)

EDUC 147X. Human-Computer Interaction in Education — Required for students in the Learning Design and Technology Master's Program. Concepts underlying the design of human-computer interaction including usability and affordances, direct manipulation, systematic design methods, user conceptual models and interface metaphors, design languages and genres, human cognitive and physical ergonomics, information and interactivity structures, design tools, and environments. Studio/discussion component applies these principles to the design of interactive technology for teaching and learning.

3 units (Walker) not given 2005-06

EDUC 148X. Critical Perspectives on 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.

3-5 units (Valdés) not given 2005-06

EDUC 149. Theory and Issues in the Study of Bilingualism—(Graduate students register for 249; see 249; same as SPANLIT 207.) (SSPEP) *3-5 units, Aut (Valdés)*

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, simple analysis of variance, simple and multiple regression, and contingency analysis.

3-4 units, Aut, Win (Porteus)

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

3-4 units, Aut (Pope)

EDUC 151B. Qualitative Research Methods: Part 2—Primarily for master's students. Prerequisite: 151X.

4 units (Staff) not given 2005-06

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, Win (Kushner)

EDUC 155. Development of Measuring Instruments—For students planning to develop written or performance tests or questionnaires for research and evaluation, and for teachers wishing to improve classroom examinations. Planning tests, writing items, item tryout and criticism, qualities desired in tests, and interview techniques. Lectures, case studies, and practical exercises. (PSE)

3 units (Haertel) not given 2005-06

EDUC 156A. Understanding Racial and Ethnic Identity—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, Win (LaFromboise)

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 for STATS 60/160. (all areas)

4 units, Aut (Shavelson)

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

3-4 units, Spr (Labaree)

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)

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)

EDUC 176X. Psychological Issues in Old Age—Development and decline as contexts for the challenges of psychological issues in old age. 2 units (Staff) not given 2005-06

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)

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 (Valdés) not given 2005-06

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 (McLaughlin) not given 2005-06

EDUC 179B. Youth Empowerment and Civic Engagement— (Graduate students register for 279B.) Focus is on youth development policies and practices: what makes them effective, and how they operate in broader institutional contexts. Research-based information; conceptual underpinnings; best learning from experience; and the perspective of expert youth workers, policymakers, and youth about what works.

2-4 units (McLaughlin) not given 2005-06

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. Methodology Workshop—Two sessions on developing questionnaires or surveys; individual coaching by instructors. Focus is on obtaining quantitative information; some qualitative information. Prerequisite: students should be starting or in the process of developing a questionnaire or survey for research purposes.

1-2 units (Porteus) not given 2005-06

EDUC 193A. Peer Counseling: Bridge Community—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)

EDUC 193B. Peer Counseling: Chicano 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.

2 units, Aut (Martinez)

EDUC 193C. Peer Counseling: 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.

2 units, Aut (Edwards)

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.

2 units, Spr (Brown)

EDUC 193N. Peer Counseling: 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.

2 units, Win (Simms, LaFromboise, Martinez)

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)

EDUC 196. Feminist Theories of Work and Families—(Same as FEMST 102L.) Economic, sociological, and legal perspectives; mainstream and feminist theories are contrasted. Emphasis is on the present day U.S. with issues in other countries and/or other historical periods. Topics: labor force participation, occupational segregation, labor market discrimination, emotional labor, unpaid work, caring labor, child care, combining work and family, single-parent families, poverty, marriage, and divorce.

4-5 units (Strober) not given 2005-06

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 (Staff) not given 2005-06

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, Lunsford)

EDUC 199A,B,C. Undergraduate Honors Seminar—Required for all juniors and seniors in the honors program in the School of Education. Supports students' involvement and apprenticeships in educational re-

search. Participants are expected to share ongoing work on their honors thesis. Prerequisite: consent of instructor.

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

EDUC 200. The Work of Art and the Creation of Mind—Collaboration among the Art, Dance, Drama, and Music programs, and the School of Education. The relationship between the work of art and the creation of mind: the work of art as a task of making something and as a form that has been made. How a conception of art develops and refines the mind. Observation of artists at work. The relationship between forms of art and forms of thought. What does either the perception or creation of art in any of its forms do to how one thinks and knows? GER:DB-Hum

4 units (Staff) not given 2005-06

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 WW II. The role of gender and race, the development of the high school and university, and school organization, curriculum, and teaching. (SSPEP) GER:DB-Hum

3-4 units, Win (Williamson)

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) GER:DB-Hum

3-4 units, Aut (Williamson)

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)

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 (Staff)

EDUC 2021. 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, Spr (Staff)

EDUC 203B. The Problem of Arrogant Knowledge—How the naming and maiming of learners is supported by a vocabulary of ability and disability and institutional slots and budget lines. How alienation can be a first step in reorganization. Marx on estranged labor, Lave and Mcdermott on estranged learning, and Merleau-Ponty and Volosinov on the dramatics of language activities in human affairs.

2-3 units (McDermott) not given 2005-06

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 (Staff)

EDUC 206A. Applied Research Methods in International and Comparative Education I: Introduction—Required for 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 (Staff)

EDUC 206B. Applied Research Methods in International and Comparative Education II: Master's Monograph Proposal—Required for 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 (Staff)

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 (Staff)

EDUC 207A,B,C. Master's Seminar in Curriculum and Teacher Education—Limited to master's students in C&TE. Designed to support students as they develop and conduct a master's project. Students discuss ideas for their project, learn about possibilities for master's projects, develop a plan for a project, carry it out, and write up the results with the assistance of the instructors and peers.

1-2 units, A: Aut (Post)

1-5 units, **B:** Win (Post), **C:** Spr (Post)

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)

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)

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. GER:DB-Hum

3-4 units, Spr (McDermott)

EDUC 213. Aesthetic Foundations of Education—What role might the arts play in education? Do the arts contribute to the development of cognitive skills? Do they help humans understand the world in which they live? Are aesthetic considerations central in the way we think about the aims of education? Do they enhance teaching and school organization? (CTE)

4 units (Eisner) not given 2005-06

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) GER:DB-Hum

3 units, Spr (Phillips)

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, Win (Phillips, Shavelson)

EDUC 218. Topics in Cognition and Learning: Quantitative Reason-

ing—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?

3 units, Aut (Schwartz)

EDUC 219. Artistic Development of the Child—How can children's and adolescents' development in the arts be described? What role does the symbolic transformation of experience play in the creation of those images we regard as art? What can teachers do to promote the development of artistic thinking? These and other questions are examined through the study of theory and research conducted within the social sciences. (CTE)

4 units, Win (Eisner)

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, Aut (Loeb)

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) GER:DB-SocSci

4 units, Spr (Kirst)

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. GER:DB-SocSci

4-5 units, Win (Ramirez)

EDUC 220D. History of School Reform: Origins, Policies, Outcomes, and Explanations—Required for 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)

4 units, Aut (Labaree)

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, Aut (Loeb)

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)

3-5 units, Win (Koppich)

EDUC 221B. Micro and Macro Issues in Policy Analysis—Doctoral students use their own research interests to explore the analytical, empirical, and methodological aspects of micro and macro perspectives on policy and action.

3 units (McLaughlin) not given 2005-06

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)

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 focuses on a school. (SSPEP/APA, CTE)

3-4 units, Win (Cuban)

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, Spr (Walker)

EDUC 227X. Interaction Design for Learning Environments—Principles and methods of interaction design prototyping emphasizing interactive learning environments. Students individually or in small groups work on an interaction design project, developing detailed prototypes of key interaction ideas.

3-4 units (Walker) not given 2005-06

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)

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.

4 units, Aut (Juel)

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.

3 units, Aut (Juel)

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. Student 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 (Goldman)

B: 3 units, Win (Staff)

C: 3 units, Spr (Staff)

D: 3-4 units, Sum (Walker)

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, Win (Boaler)

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, Aut (Walker)

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 (Brown) not given 2005-06

EDUC 233A. Counseling Theories and Interventions from a Multi- cultural Perspective—The impact of culture on counseling and intervention, theory problem presentation, relationship formation, and intervention development and evaluation in individual and group counseling, and in helping encounters in school and community settings.

3 units, Win (LaFromboise)

EDUC 234. Career and Personal Counseling—(For graduate students; see 134; same as PSYCH 192.) (PSE)

3 units, Spr (Krumboltz)

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)

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 (Darling-Hammond, Nasir, Padilla)

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, Win (Ball)

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, Lawrence)

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 (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 (Haysman, Lotan)

B: 1-3 units, Aut (Lotan)

C: 5 units, Win (Haysman, Lotan)

D: 2-6 units, Spr (Haysman, Lotan)

EDUC 246E,F,G. Elementary Teaching Seminar and Practicum—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. Prerequisite: STEP student.

E: 4-5 units, Aut (Staff)
F: 5 units, Win (Staff)

G: 1 unit, Spr (Staff)

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)

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) GER:DB-Hum

3-5 units, Aut (Valdés)

EDUC 250A. Statistical Analysis in Educational Research—Primarily for doctoral students. Regression and categorical models as widely used data-analytic procedures. Topics: basic regression including multiple and curvilinear regression, regression diagnostics, analysis of residuals and model selection, logistic regression, analysis of categorical data. Proficiency with statistical computer packages. Prerequisite: 160 or equivalent. (all areas)

4 units, Win (Reardon)

EDUC 250B. Statistical Analysis in Educational Research: Analysis of Variance—Primarily for doctoral students. Variance models as widely used data analytic procedures, especially in experimental, quasi-experimental, and criterion-group designs. Topics: single-factor ANOVA, the factorial between and within subjects and mixed design ANOVA (fixed, random, and mixed models), analysis of covariance, multiple comparison procedures. Prerequisite: 160X or equivalent. (all areas)

4 units (Shavelson) not given 2005-06

EDUC 250C. Statistical Analysis in Educational Research: 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. Prerequisites: 250B, 257, STATS 200, or equivalent. (all areas)

2-4 units, Win (Olkin)

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, Spr (Haertel)

EDUC 255. Human Abilities—(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) GER: DB-SocSci

3 units (Shavelson) not given 2005-06

EDUC 256X. 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, Spr (LaFromboise)

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 (Rogosa) alternate years, given 2006-07

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 (Rogosa) alternate years, given 2006-07

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 (Reardon) not given 2005-06

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. Models that inform both literacy development. How classroom instruction affects literacy development.

3 units, Spr (Juel)

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)

EDUC 260X. Popular Advanced Statistical Methods—Methods for accommodating the nested structure of educational data, such as students within classrooms within schools, which arise as units of analysis problems, ecological regression, or hierarchical linear models. Methods for complex measurement models in regression settings known as structural equation models, causal models, covariance structures. See http://www.stanford.edu/class/ed260.

3 units, Win (Rogosa)

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)

B: 3 units, Aut (Staff)

C: 3 units, Win (Grossman)

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 (Boaler), **C:** Win (Boaler)

EDUC 263E,F,G. Quantitative Reasoning in Mathematics I,II,III—

Three-course sequence in mathematics for STEP elementary teacher candidates. Content, pedagogy, and context. Mathematics subject matter; the orchestration of teaching and learning of elementary mathematics including curriculum, classroom and lesson design, and case studies. Sociocultural and linguistic diversity, equity, differentiation of instruction, the impact of state and national standards, and home/community connections.

EDUC 263E. Quantitative Reasoning in Mathematics I 4 units, Win (Murata)

EDUC 263F. Quantitative Reasoning in Mathematics II 4 units, Win (Murata)

EDUC 263G. Quantitative Reasoning in Mathematics III 3 units, Spr (Murata)

EDUC 264A,B,C. Curriculum and Instruction in World Languages —Approaches to teaching foreign languages in the secondary school,

 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 (Valdes)

B: 3 units, Aut (Staff)

C: 3 units, Win (Staff)

EDUC 264E. Methods and Materials in Bilingual Classrooms—For 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. M.A. and Ph.D. students require consent of instructor.

3-4 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, Spr (Labaree)

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, Spr (Reardon)

EDUC 267A,B,C. 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, Lythcott)

B: 3 units, Aut (Lythcott)

C: 3 units, Win (Brown, Lythcott)

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*, *Win* (*Staff*)

EDUC 268A,B,C. Curriculum and Instruction in History and Social Science—The methodology of social studies instruction: curriculum trends, teaching materials, opportunities to develop teaching and resource units. Prerequisite: STEP student.

A: 2 units, Sum (Wineburg)

B: 3 units, Aut (Wineburg)

C: 3 units, Win (Wineburg)

EDUC 268E. Elementary History and Social Science—Teaching and learning history and social science in the elementary grades. What is included in the discipline and why it is important to teach. The development of historical thinking among children. How students learn and understand content in these disciplines.

3-4 units, Spr (Staff)

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 (Brown, Pea) not given 2005-06

EDUC 269E. Reflective Practice: Performance Assessment for California Teachers (PACT)—Student learning and the epistemology of elementary school subjects as they relate to planning and teaching, curriculum analysis, and performance evaluation. Focus is on preparing for PACT. Course coordinated with student teaching activities of participants.

1 unit, Spr (Staff)

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

3-5 units, Spr (Davis)

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, Spr (Darling-Hammond)

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.

5 units, Win (Strober)

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)

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

4 units, Win (Padilla)

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)

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

4-5 units (McLaughlin) not given 2005-06

EDUC 279B. Youth Empowerment and Civic Engagement—(For graduate students; see 179B.)

2-4 units (McLaughlin) not given 2005-06

EDUC 281X. Using Literacies to Support Struggling Students—Issues related to meeting the needs of struggling readers and writers and special needs students in their classrooms. Emphasis is on students who appear to be struggling learners in middle and high school classrooms who have not been previously or officially identified to receive special educational resources.

3 units (Ball) not given 2005-06

EDUC 284. Teaching 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)

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.

3 units, Spr (Fur)

EDUC 287. Culture and Learning—(Same as CASA 158X.) Learning in institutional settings in the U.S. and around the globe. Learning in families, in schools, on the job, and on the streets. Emphasis is on the cultural organization of success and failure in American schools. Tentative consideration of opportunities for making less inequality. (SSPEP, STEP)

3-4 units (McDermott) not given 2005-06

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)

EDUC 290. Leadership: Research, Policy, and Practice—Conceptions 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)

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), Win (Schwartz), Spr (Goldman)

EDUC 292X. Cultural Psychology—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, Win (Nasir)

EDUC 294X. Theories of Human Development—Concepts and theoretical viewpoints of developmental science. Goal is to evaluate multidisciplinary applications of empirical developmental research including its impact on educational reform, interventions, and social policy issues.

3 units, Spr (Perez-Granados)

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 (Barron, Pea)

EDUC 296. Substance Dependence: Assessment, Treatment, and Prevention—Open to social science graduate students. The prevalence, etiology, and treatment of alcohol and drug-related disorders. Developmental perspective; how substance abuse disorders manifest themselves in men and women at different ages from childhood through late adulthood. Beneficial treatment approaches such as AA, individual and group work, family treatment, and inpatient versus outpatient care. Required visit to treatment programs. (PSE)

3 units (Moffett) not given 2005-06

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 (Pea) not given 2005-06

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, Spr (Williamson)

EDUC 304. The Philosophical and Educational Thought of John Dewey—(Same as PHIL 230.) 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 (Phillips) not given 2005-06

EDUC 305X. Progressive Education, the Free Child, and the Critics—Radically different models of child rearing and their implications for educational practice. Topics include: Rousseau's *Emile*, Puritan education, Summerhill School and the philosophy of open education, contemporary orthodox and evangelical schools, and democratic schools. Mock debates. How these models inform educational alternatives locally; classroom observation.

4 units, Win (Corngold)

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)

EDUC 306B. Politics, Policy Making, and Schooling Around the World—Education policy, politics, and development. Topics include: political socialization and the formation of political identity among young people and adults; how schools, school systems, and universities operate as political systems; how policy making occurs in educational systems; and theories of development.

3 units, Spr (Adams)

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, Win (McDermott)

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. GER:DB-SocSci

4-5 units, Win (Ramirez)

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, Win (Staff)

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)

EDUC 310. Sociology of Education: The Social Organization of Schools—(For graduate students; see 110; same as SOC 132/332.) (SSPEP)

4 units, Spr (McFarland)

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)

1-2 units, Aut, Win, Spr (Stipek)

EDUC 312A. Traditions of Microsociology—(Same as SOC 224A.) The educational applications of sociological and social psychological theory and research to interaction processes in schools. Readings include: foundational works by Mead, Schutz, and Simmel; contemporary work by Goffman, Homans, Merton, Blau, and Harold. Readings span empirical settings such as work, classrooms, gangs, primate societies, and children's games. Topics: processes of influence, role differentiation, identity formation, social mechanisms, and intra/inter group dynamics of peer relations. Methods for observation and analysis of small groups. (SSPEP)

4 units (McFarland) not given 2005-06

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 (Carnoy) not given 2005-06

EDUC 316. Network Analysis of Formal and Informal Organizations—(Same as SOC 369.) The educational applications of social network analysis. Introduction to social network theory, methods, and research applications in sociology. Network concepts of interactionist (balance, cohesion, centrality) and structuralist (structural equivalence, roles, duality) traditions are defined and applied to topics in small groups, social movements, organizations, communities. Applications to data on schools and classrooms. (SSPEP)

4-5 units (McFarland) alternate years, given 2006-07

EDUC 317X. Workshop on Community and Youth Development—(Same as SOC 317C.) The Youth Development Seminar presents an opportunity to discuss, read, and collaborate on youth development research issues by providing participants with access to the National Longitudinal Study of Adolescent Health Data (requires permission), tutorials on statistical methods to facilitate analysis of the dataset, and articles that help researchers develop tools of inquiry. Participants present their work for feedback.

1-2 units (Staff) not given 2005-06

EDUC 319. Sociology and Education Seminar—(Same as SOC 319.) Venue to discuss a new field of specialization or research issues, or for student/faculty collaborative research. This year's focus is on distributed systems and their dynamics, including individual adaptations to situations, use of tools in learning, emergence of stable patterns of group behavior from the interdependent actions of individual actors, the adaptation of groups to crises, emergence of collective action and social movements, and organizational adaptations to external and internal events. May be repeated for credit.

3 units (McFarland) not given 2005-06

EDUC 321A. Emerging Concepts 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, Spr (Eisner, McDermott)

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 (Ball) not given 2005-06

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, Aut (Kirst)

EDUC 324. Business Opportunities in Education — (Same as GSBGEN 545.) For students in the joint degree program in Business and Education; open to others. The combination of changing market mechanisms and emerging technologies fueling opportunities in for-profit education and training organizations. Interaction of firms with public sectors. Roles of public administrators, educators, investors, and technology providers in defining opportunities, challenges, and constraints for education and training firms. Approaches to strategy formation, product development, and operations. Visiting managers and other experts. (SSPEP/APA)

2 units, Win (Kirst, Wood)

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)

EDUC 327A,B. 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, Aut (Goldman)

B: 1-3 units (Goldman) not given 2005-06

EDUC 327C. The Conduct of Qualitative Inquiry—For doctoral students. Students bring research data for analysis and writing. Preference to those who have completed 327A or B.

1-4 units, Spr (Goldman)

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, Spr (Schwartz)

EDUC 329X. Seminar on Teacher Professional Development—Theory and practice. Models of professional development. Issues include: concepts of teachers, practice, and development; the content of professional development; pedagogies; structures that support teacher learning; evaluating professional development; and policy issues. Field observation.

1-4 units, Spr (Post)

EDUC 330X. Economic Approaches to Education Policy Analysis—(Same as GSBGEN 347.) Policy issues in education using the tools of microeconomics. How are schools funded and with what implications for the efficiency, equity, and adequacy of resources? What is the impact of school resources on educational and economic well-being? How do teacher labor markets operate and how do teachers impact student achievement? How do systems of school choice affect schools and students? How has accountability changed schooling? What are the effects of changes in affirmative action and financial aid in higher education? Prerequisites: intermediate microeconomics and regression analysis.

4 units (Loeb) not given 2005-06

EDUC 331A,B. 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)

A: 3-5 units, Spr (Gumport, Loeb) **B:** 3 units, (Staff) not given 2005-06

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

3 units, Aut (Perez-Granados)

EDUC 335X. Language Policy and Planning: National and International Perspectives—For graduate students, and undergraduates with consent of instructor. International study of the social, political, and educational tensions that shape language policy. Emphasis is on language education that affects immigrants, guest workers, and indigenous linguistic minority populations; policies that determine foreign language instruction, and U.S. language policies in a comparative approach. (SSPEP) GER:DB-SocSci

3 units (Staff) not given 2005-06

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 (Brown) not given 2005-06

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

3 units, Win (Ball)

EDUC 340X. American Indian Mental Health and Education — Western medicine as defining health as the absence of sickness, disease, or pathology. Native American cultures as understanding health as the balance or beauty of all things physical, spiritual, emotional, and social, and sickness as something out of balance. Topics in American Indian psychology and health; issues that characterize the field, and its methods, goals, and findings. Prerequisite: experience working with American Indian communities. (PSE)

3-5 units (LaFromboise) not given 2005-06

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.

1-3 units, Win (Barron, Perez-Granados)

EDUC 344. Child Development and Schooling—How the practices and activities of schooling influence the social, emotional, and cognitive development of children. Metatheoretical approaches (mechanistic, organismic, developmental contextualist metamodels) and methods of conducting research on schooling and development (experimental, survey, ethnographic, intervention). Topics: how teaching practices influence cognitive growth in academic domains; how the organizational structures of schools (grade related transitions, class organizations) fit or fail to fit developmental needs; how friendship groups create contexts for learning and can lead to different trajectories of development; and how grading and other evaluative practices influence motivational orientations. Focus is on elementary school years. (PSE)

3-4 units (Barron) not given 2005-06

EDUC 345X. Adolescent Development and Schooling—How the context of school and its relationship to other major context developments (family, peer group, and neighborhood) influence the social, emotional, and cognitive development of secondary school-aged youths. Metatheoretical approaches (mechanistic, organismic, developmental contextualist metamodels) and methods of conducting research on schooling and development (laboratory, survey, ethnographic, intervention). Topics: school transitions during adolescence; the role of school functioning in broader patterns of competence or distress; and how the organization of academic tasks, classrooms, and school environments as a whole can influence adolescent development. Focus is on middle and high school years. (PSE)

3 units (LaFromboise) not given 2005-06

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 (Antonio) not given 2005-06

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, Win (Strober) alternate years, not given 2006-07

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, Aut (Shavelson)

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 (Nasir) not given 2005-06

B: 2-3 units, Win (Schwartz)

C: 1-2 units, Spr (Haertel)

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, Win (Rogosa)

EDUC 351C. Workshop in Technical Quality of Educational Assessments and Accountability—Topics include: determinations of accuracy for individual scores and group summaries; design and reporting of educational assessments; achievement instruments in state-level accountability systems; and policy implications of statistical properties. See http://www.stanford.edu/~rag/. (PSE)

3 units, Spr (Rogosa)

EDUC 352X. Education Schools: Historical and Sociological Perspectives—The lowly status of the education school, defined as college, school, or department, within a university. Why does the education school get no respect? Its historical development, how it evolved into its current position in the academic hierarchy, and contemporary factors that help to reinforce that position. (SSPEP)

3-4 units (Labaree) not given 2005-06

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, Aut (Haertel)

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 (Haertel, Shavelson) not given 2005-06

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)

EDUC 355X. Higher Education and Society—For undergraduates and graduate students interested in what colleges and universities do, and what society expects of them. The relationship between higher education and society in the U.S. from a sociological perspective. The nature of reform and conflict in colleges and universities, and tensions in the design of higher education systems and organizations.

3 units (Gumport) not given 2005-06

EDUC 356X. Memory, History, and Education—Interdisciplinary. Since Herodotus, history and memory have competed to shape minds: history cultivates doubt and demands interpretation; memory seeks certainty and detests that which thwarts its aims. History and memory collide in modern society, often violently. How do young people become historical amidst these forces; how do school, family, nation, and mass media contribute to the process?

3-5 units (Wineburg) not given 2005-06

EDUC 357X. Interdisciplinarity in Higher Education — The historical prominence of disciplines in higher education, departmental structures, and disciplinary reproduction and professional socialization in graduate education. Definitions of interdisciplinarity and motivations for fostering it in research and teaching. Case studies including feminist, area, environmental, American, and interdisciplinary science studies. The development of interdisciplinary fields and organizational constraints including tenure and promotion, faculty reward systems, and undergraduate curricular structures. Recent initiatives to foster interdisciplinary activity among senior faculty.

3 units (Gumport, Strober) not given 2005-06

EDUC 359A. Research in Science and Mathematics Education: Assessment and Evaluation—Historical and international perspectives. Emphasis is on trends and issues in contemporary American research and policy. Opportunity to develop and discuss dissertation plans. (CTE)

2-3 units (Shavelson) not given 2005-06

EDUC 359B. Research in Science and Mathematics Education—For doctoral students interested in science education and literacy in school subjects.

2-3 units, Win (Brown)

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 units (Murata) not given 2005-06

EDUC 360. Action Research in Education — Introduction to the theory and practice of action research. Basic concepts and methods. The historical and ideological influences on this form of inquiry by teachers. Participants analyze action research reports and engage in a small-scale action-research project. (CTE)

3 units, Win (Atkin)

EDUC 362X. Teacher Learning and Lesson Study—Seminar. Based on peer collaboration, lesson study helps to create professional communities among teachers and support their learning. Research literature, teacher thinking and beliefs, teacher professional development, and conceptual frameworks.

3-4 units (Murata) not given 2005-06

EDUC 363X. Research and Practice on Organizing Urban Elementary 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)

EDUC 370X. Theories of Cognitive Development—The contributions of Jean Piaget and Lev Vygotsky to the study of the developing mind of the child. Their theories, concepts, perspectives, empirical work, and lives. Topics: Piaget's genetic epistemology, constructivism, and idea of sensorimotor through formal operational stages; Vygotsky's cultural-historical approach, egocentric speech, and the relation between learning and development.

3 units, Win (Nasir)

EDUC 371X. 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 units (Perez-Granados) not given 2005-06

EDUC 372B. Ethnography for Human Learning and Development—Issues in fieldwork, epistemology, modes of analysis, forms of data, ethical issues, and trends in reporting ethnographic work. Contemporary ethnographic inquiry in the context of other modes of inquiry in the developmental sciences. Commensurability across theoretical frameworks, units of analysis, time scales, and methods. Prerequisite: consent of instructor.

3 units (Pea, Barron) not given 2005-06

EDUC 372X. Social Processes in Learning and Development — Doctoral seminar. How children's learning and development are influenced by social interactions with parents, peers, teachers, and the larger cultural context. Emphasis is on research that illuminates social/cognitive processes that influence the development of individual thinking: observation and imitation of models, co-construction of meaning and achievement of intersubjectivity, providing and receiving explanations, and sociocognitive conflict. How culture influences the behavior of individuals in interaction; how school culture influences children's individual thinking and thinking in collaboration with others. (PSE)

3 units (Barron) not given 2005-06

EDUC 374A,B. Research Workshop: Knowledge Networks—(Same as SOC 374A,B.) Research workshop. Key factors that shape processes of transferring basic knowledge into commercial development. Topics: the sociology and economics of science, intellectual property and patenting issues, university-industry relations, cross-national differences in knowledge transfer and science/technology policy, and entrepreneurial activity in universities. Students must have or develop research projects on these topics. Undergraduate prerequisite: consent of instructor.

A: 1-3 units, Win (Powell)

B: 2-3 units, Spr (Powell)

EDUC 375A. Seminar on Organizational Theory—(Same as SOC 363A.) For Ph.D. students. Social science literature on organizations. Major theoretical traditions and debates. The intellectual development of the field reflects shifts in emphasis in studies from workers to managers, organizational processes to outputs, and single organizations to populations of organizations. May be repeated for credit.

5 units, Win (Powell)

EDUC 375B. Seminar on Organizations: Institutional Analysis—(Same as SOC 363B.) The fruitfulness of research programs from institutional, network, and evolutionary perspectives in explaining large-scale change in organizational populations and institutions.

3-5 units, Spr (Powell)

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, Win (Carnoy)

EDUC 377. Comparing Institutional Forms—(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 (Powell) not given 2005-06

EDUC 377B. Strategic Management of Nonprofits—(Enroll in STRAMGT 368.)

4 units, Win (Staff)

EDUC 377C. Strategic Issues in Philanthropy—(Same as GSBGEN 381.)

4 units, Spr (Arrillaga)

EDUC 378X. Seminar on Organizations and Society—Organizational theories applied to social problems and social change. Topic varies annually. Focus in 2005-06 is organizing for social change. Other topics include: the reproduction of race and gender injustices in organizations, organizing across borders, and organizational change and learning.

3-4 units, Aut (Meyerson)

EDUC 379B. Public Policy Towards Disconnected Youth—(Same as LAW 356.)

4 units, Aut, Win, Spr (Staff)

EDUC 380. Internship in Educational Administration

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

EDUC 381. Multicultural Issues in Higher Education—The primary social, educational, and political issues that have surfaced in American higher education due to the rapid demographic changes occurring since the early 80s. Research efforts and the policy debates include multicultural communities, the campus racial climate, and student development; affirmative action in college admissions; multiculturalism and the curriculum; and multiculturalism and scholarship.

4-5 units (Antonio) not given 2005-06

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 (Antonio) not given 2005-06

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 innnovation, authority and power, diversity and equity, and interactions with government and industry. Prerequisites: 346, consent of instructor. (APA)

3-5 units, Spr (Gumport)

EDUC 387A,B,C. 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)

1-5 units, A: Aut, B: Win, C: Spr (Ramirez, Meyer)

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 (Staff)

EDUC 388E. Elementary Teaching of English as a Second Language—For STEP Elementary credential candidates. Theory-based methods to assess English learners' growth in language and literacy acquisition. How to create learning environments which promote English language development, and content area learning through Specially Designed Academic Instruction in English (SDAIE). Lesson presentation, videotape analysis, instructional and assessment methods, and materials exploration.

3 units, Aut (Staff)

EDUC 391. 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.

3-5 units, Aut (Kim)

EDUC 392X. Enterprising Higher Education in the Digital Age—Trends and impacts in the for-profit higher education industry. Business, financial, and technical infrastructure; accreditation and regulatory implications; technologies; practical issues in school establishment and operation; and business measurements. Student teams complete final project which may involve: analyzing existing for-profit educational enterprise, developing a business plan with a pro-forma for a small scale institute for non-traditional students, reporting on accreditation and regulatory issues around for-profit education, or developing a prototype of an online training curriculum.

3 units (Kim) not given 2005-06

EDUC 393. Proseminar on Research in Education—Overview of the field of education for joint degree students (M.B.A./M.A.). 2 units for readings and participation; 4 units requires four short papers in consultation with instructor. (SSPEP)

2-4 units, Spr (Strober)

EDUC 395X. Scholarly Writing in Education and the Social Sciences—Workshop. How to write for professional journals.

3-5 units (Wineburg) not given 2005-06

EDUC 401A. Mini Courses in Methodology: Statistical Packages for the Social Sciences—For doctoral students. Limited enrollment. Prerequisite: consent of instructor.

1 unit (Gelbach) not given 2005-06

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.

2-4 units, Aut, Win, Spr (Strober)

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 (Ramirez)

EDUC 417X. Research and Policy on Postsecondary Access—(For graduate students; see 117X.)

3 units (Antonio) not given 2005-06

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, Win (Gumport)

EDUC 420B. Philosophy of Education—Particular issues during designated quarters. Enrollment limited; sign up with instructor prior to beginning of quarter. (SSPEP)

1-3 units (Staff) not given 2005-06

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 (Ramirez)

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)

EDUC 430A. Advanced Seminar in Childhood and Adolescent Development — For students interested in research and training opportunities at the Center on Adolescence, and those interested in how to interpret and conduct research in child and adolescent development. Topics include: empathy and prosocial behavior, personality development, self-concept, motivation, peer relations, family influences, and anti-social behavior. Emphasis is on major theoretical and research traditions.

3 units, Aut (Damon)

EDUC 435X. Research Seminar in Applied Linguistics—For graduate students in the schools of Education and Humanities and Sciences who are engaged in research pertaining to applied linguistic topics in original research. Topics: language policies and planning, language and gender, writing and critical thinking, foreign language education, and social applications of linguistic science. (SSPEP)

1-4 units (Baugh) not given 2005-06

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 and simulations and hypermedia materials. Theoretical considerations of how teachers learn to teach.

2-3 units, Win (Grossman)

EDUC 466. Doctoral Seminar in Curriculum—Required of all doctoral students in CTE, normally during their second year in the program. Students present their ideas regarding a dissertation or other research project, and prepare a short research proposal that often satisfies their second-year review. (CTE)

2-4 units, Win (Eisner)

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)

OVERSEAS STUDIES

Descriptions of these courses are in the "Overseas Studies" section of this bulletin or at the Overseas Studies office, 126 Sweet Hall.

FLORENCE

EDUC 90Z. Learning to Learn: Italian Theories of Early Childhood Education

3 units, Aut (Grossman)

EDUC 91Z. Doing School: A Comparative Study of American and European High Schools

3 units, Aut (Grossman)