PROGRAMS OF STUDY

Graduate study in education at CU Boulder is administered through the Office of Student Services, School of Education, and all inquiries regarding programs should be directed to the contact address at the right.

Detailed program information is available on the school’s Graduate Programs website. Students should also obtain and read the School of Education Graduate Student Handbook.

Degree Programs

The degrees available in the various areas of graduate study are listed below. CU Boulder does not offer programs in early childhood education, physical education, art education, counseling, school administration, school psychology or educational technology.

Curriculum and Instruction

K–12 humanities education, K–12 mathematics and science education, K–12 literacy education and research on teaching & teacher education.

- Master of Arts
- Doctor of Philosophy
- Secondary Master's Plus (MA+) Licensure Programs

CU Boulder offers special programs for prospective secondary teachers that combine a master of arts degree in curriculum and instruction in a content area and teacher licensure to qualified students already holding bachelor's degrees. Admission is highly competitive, and program completion requires a two-year commitment of course work and school placements. Students in the MA+ programs become eligible for a Colorado teaching license after three semesters; they complete remaining course work for the master's degree in the fourth semester. Applicants must meet all graduate requirements listed below and undergo an extensive screening process. This program admits students for fall semester only. Complete program information is available in the Office of Student Services (Education 151) or by calling 303-492-6555.

Educational Equity & Cultural Diversity

Culturally & Linguistically Diverse Education, Dual Culturally & Linguistically Diverse Ed with Special Ed Generalist and Social/Multicultural/Bilingual Education.

- Master of Arts
- Doctor of Philosophy

Education Foundations, Policy & Practice

- Master of Arts
- Doctor of Philosophy

Learning Sciences & Human Development

- Master of Arts
- Doctor of Philosophy

Research and Evaluation Methodology

Methods of educational research and evaluation, including statistics, measurement and qualitative methods.

- Doctor of Philosophy

BA/MA in Ethnic Studies and Education

Teaching Endorsements at the Graduate Level

Through the School of Education (and in conjunction with other departments), CU Boulder offers advanced course work leading to graduate level teaching and special services training in the following areas:

- Culturally and linguistically diverse education (grades K–12)
- Culturally and linguistically diverse education specialist: bilingual education (grades K–12)
- Reading teacher (grades K–12)
- Special education generalist (grades K–12)
- Special education specialist (grades K–12)
- Special services (offered through SLHS): audiologist (ages 0–21); speech/language pathologist (ages 0–21)

All of the above programs have degree, licensure or experience requirements that must be fulfilled before admission. Please check with the department before applying.

Graduate programs combining the MA and secondary teacher licensure are also available.

Accreditation

The licensure programs, both undergraduate and graduate, are fully accredited by the North Central Association of Colleges and Schools, the Council for Accreditation of Educator Preparation, the Colorado Department of Education and the Colorado Commission on Higher Education.

Faculty

While many faculty teach both undergraduate and graduate students, some instruct students at the undergraduate level only. For more information, contact the faculty member's home department.

Aiken, Ellen (https://experts.colorado.edu/display/fisid_103974)
PhD, University of Colorado Boulder

Anderson, Ronald
Professor Emeritus

Andrew, Julie Ann (https://experts.colorado.edu/display/fisid_148635)
Instructor; MEd, Univ of New South Wales (Australia)

Atteberry, Allison (https://experts.colorado.edu/display/fisid_154598)
Assistant Professor; PhD, Stanford University

Begley, Donna M (https://experts.colorado.edu/display/fisid_131000)
Senior Instructor

Boardman, Alison Gould (https://experts.colorado.edu/display/fisid_141887)
Asst Research Professor; PhD, University of Texas at Austin

Briggs, Derek Christian Mauthner (https://experts.colorado.edu/display/fisid_129597)
Professor; PhD, University of California-Berkeley

Accreditation

The licensure programs, both undergraduate and graduate, are fully accredited by the North Central Association of Colleges and Schools, the Council for Accreditation of Educator Preparation, the Colorado Department of Education and the Colorado Commission on Higher Education.
Bullington, Sam N (https://experts.colorado.edu/display/fisid_152528)  
Lecturer

Cline, Ruth  
Professor Emeritus

Dalton, Bridget Monroe (https://experts.colorado.edu/display/fisid_151711)  
Associate Professor; EdD, Harvard University

Donato, Ruben (https://experts.colorado.edu/display/fisid_105537)  
Professor; PhD, Stanford University

Dutro, Elizabeth (https://experts.colorado.edu/display/fisid_141157)  
Professor; PhD, University of Michigan Ann Arbor

Escamilla, Kathy M (https://experts.colorado.edu/display/fisid_109224)  
Professor; PhD, University of California-Los Angeles

Flexer, Roberta  
Professor Emeritus

Furtak, Erin M (https://experts.colorado.edu/display/fisid_144504)  
Associate Professor; PhD, Stanford University

Glass, Gene V (https://experts.colorado.edu/display/fisid_149833)  
Research Professor; PhD, University of Wisconsin-Madison

Haas, John  
Professor Emeritus

Hand, Victoria (https://experts.colorado.edu/display/fisid_144609)  
Associate Professor; PhD, Stanford University

Hodge, Stephen  
Professor Emeritus

Hoover, John J (https://experts.colorado.edu/display/fisid_113520)  
Assoc Research Professor; PhD, University of Colorado Boulder

Hopewell, Susan Walsh (https://experts.colorado.edu/display/fisid_145039)  
Assistant Professor; PhD, University of Colorado Boulder

Hopkins, Kenneth  
Professor Emeritus

House, Ernie  
Professor Emeritus

Jurow, Aachey Susan (https://experts.colorado.edu/display/fisid_129478)  
Associate Professor; PhD, University of California-Berkeley

Kirshner, Benjamin R (https://experts.colorado.edu/display/fisid_134707)  
Associate Professor; PhD, Stanford University

Kraft, Richard  
Professor Emeritus

Lecompte, Margaret D.  
Professor Emeritus

Linn, Robert L.  
Professor Emeritus

Liston, Daniel P (https://experts.colorado.edu/display/fisid_102033)  
Professor; PhD, University of Wisconsin-Madison

Lopez, Enrique J (https://experts.colorado.edu/display/fisid_151426)  
Assistant Professor; PhD, Stanford University

McGinley, William (https://experts.colorado.edu/display/fisid_102195)  
Associate Professor; PhD, University of Illinois at Urbana-Champaign

McWilliams, Jenna Marie (https://experts.colorado.edu/display/fisid_155195)  
Lecturer

Meens, David Eric (https://experts.colorado.edu/display/fisid_145241)  
Lecturer

Meyer, Elizabeth Jackson (https://experts.colorado.edu/display/fisid_156354)  
Associate Professor; PhD, McGill Univ (Canada)

Molnar, Alex John (https://experts.colorado.edu/display/fisid_148836)  
Research Professor; MSW, University of Wisconsin-Milwaukee

Moses, Michele s (https://experts.colorado.edu/display/fisid_141025)  
Professor; PhD, University of Colorado Boulder

Nogueron-Liu, Silvia (https://experts.colorado.edu/display/fisid_155783)  
Assistant Professor; PhD, Arizona State University

O’Connor, Kevin C (https://experts.colorado.edu/display/fisid_148490)  
Assistant Professor; PhD, Clark University

Otero, Valerie K (https://experts.colorado.edu/display/fisid_118377)  
Professor; PhD, University of California-San Diego

Penuel, William Richard (https://experts.colorado.edu/display/fisid_149719)  
Professor; PhD, Clark University

Polman, Joseph Louis (https://experts.colorado.edu/display/fisid_151296)  
Professor; PhD, Northwestern University

Ramirez, Karen E. (https://experts.colorado.edu/display/fisid_116951)  
Instructor; PhD, University of Illinois at Urbana-Champaign

Shapiro, Ryan Benjamin (https://experts.colorado.edu/display/fisid_156418)  
Assistant Professor; PhD, Northwestern University

Shepard, Lorrie A (https://experts.colorado.edu/display/fisid_105949)  
Distinguished Professor; PhD, University of Colorado Boulder

Sideris, Sabrina C (https://experts.colorado.edu/display/fisid_120493)  
Soltero-Gonzalez, Lucinda A (https://experts.colorado.edu/display/fisid_144617)  
Lecturer; PhD, University of Arizona

Stillman, Jamy A (https://experts.colorado.edu/display/fisid_156381)  
Associate Professor; PhD, University of California-Los Angeles

Taylor, Edward Vincent (https://experts.colorado.edu/display/fisid_151510)  
Assistant Professor; PhD, University of California-Berkeley
Courses

EDUC 5005 (3) Advanced Social Foundations of Education
Critically examines the intellectual and political forces that shape the aims, policies, and practices of K-12 education in the United States.
Requisites: Restricted to Educ-Curriculum Instruction (EDCI) graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5015 (3) International / Comparative Education
Comparatively studies education in other countries, emphasizing its role in developing nations, with an emphasis on successful models in basic literacy, primary education, secondary curriculum and teacher education. Analyzes political, social and economic policies and ideologies for their relevance to the development process, including the role of international organizations: World Bank, UNICEF, UNESCO, Peace Corps and Volunteer Agencies.
Equivalent - Duplicate Degree Credit Not Granted: EDUC 4015
Additional Information: Departmental Category: Graduate Education

EDUC 5035 (3) Proseminar: Parent and Community Involvement
Focuses on models and strategies for improving parent and community involvement in the schools. Discusses administrative concerns, such as parent advisory councils, and instructional concerns, such as helping children with school assignments.
Additional Information: Departmental Category: Graduate Education

EDUC 5060 (3) Classroom Interactions
Students design and implement instructional activities informed by what it means to know and learn mathematics and science, and then evaluate the outcomes of those activities on the basis of classroom artifacts. Students examine how content and pedagogy combine to make effective teaching. Students are required to work in a classroom 4 hours per week.
Equivalent - Duplicate Degree Credit Not Granted: EDUC 4060
Requisites: Restricted to Educ-Curriculum Instruction (EDCI) graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5065 (3) Curriculum Theories
Examines four central curricular traditions: progressive; conservative; radical; and spiritual. Highlights the strengths and weaknesses of various writers within each tradition with attention paid to the conceptual features and the practical implications of each educational view. Encourages students to examine their own educational assumptions.
Additional Information: Departmental Category: Graduate Education

EDUC 5070 (3) Spirituality and Religion in Education
Examines features of religion, spirituality, and a liberal arts education, so as to further understand the constitutional, historical and cultural constraints on, and acceptable approaches to the study of religion and spirituality in American education. Specifically explores aspects of a contemplative orientation and the degree to which such an orientation should/can be pursued in K-12 public and higher education.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5075 (3) Sociology in Education
In-depth analysis of theories and concepts in sociology and education. Evolution of curriculum, organization, and enrollment characteristics of American schools. Schooling, race, class, culture, gender, stratification, and educational reform in light of paradigmatic change in theories and concepts of sociology.
Additional Information: Departmental Category: Graduate Education

EDUC 5085 (3) History of American Education
Highlights social and intellectual history perspectives of American educational history, major reform movements from the 19th century to Dewey, and assessment of how differences of race, class, ethnicity, religion, power, and gender affected American education.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5105 (3) Teaching for Understanding and Equity
Addresses perspectives and evidence-based teaching practices that promote equity and access to conceptual understanding. Introduces the knowledge base on effective and socially just teaching practices, and the theories and research that support these practices. Explores the impact of theory and research on classroom instruction.
Additional Information: Departmental Category: Graduate Education

EDUC 5115 (3) Issues in School Change and Reform
Examines recent developments in teaching, and trends in the philosophy and practice of education. Focuses special attention on a variety of issues central to school reform.
Additional Information: Departmental Category: Graduate Education

EDUC 5135 (3) Story and Memoir
Explores narrative theory and the epistemological/stylistic commitments of stories as the basis for writing memoir, as well as for studying the written and spoken memoirs of others. We use the word memoir to mean a story of “how one remembers one’s own life.” Introduces and discusses narrative theory and selected memoirs. Students engage in reflection on their own narrative-making processes and evaluate their practical and analytic understanding of daily narrative practice.
Equivalent - Duplicate Degree Credit Not Granted: EDUC 4135
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5145 (3) Gender, Literacy, and the K-12 Classroom
Explores and critiques various conceptions of gender within popular and scholarly publications that have influenced how gender and sexual diversity is approached in classrooms. Builds a theoretical stance toward gender and sexual diversity that supports equity, engagement and achievement for all children and youth. Discusses teaching strategies that thoughtfully take into account gender identities and equity.
Additional Information: Departmental Category: Graduate Education
EDUC 5165 (3) Children's Literature
Involves reading and evaluation of picture books, and emphasizes children's interests, authors and illustrators, multicultural literature, the components of narrative, and the features of illustrations. Examines connections between children's literature and children's development as writers.
Additional Information: Departmental Category: Graduate Education

EDUC 5205 (3) Elementary Mathematics Theory and Methods
Provides pre-service teachers opportunities to explore contemporary theories of learning, curriculum development, and pedagogical strategies pertaining to teaching elementary-level mathematics. Blends exploration in mathematical content with development of sophisticated mathematical models for teaching.
Requisites: Requires corequisite course of EDUC 4351. Restricted to Elementary Education (EDEL) majors only.
Additional Information: Departmental Category: Elementary Education

EDUC 5215 (3) Elementary Science Theory and Methods
Provides pre-service elementary teachers opportunities to explore contemporary theories of learning, curriculum development, pedagogical strategies, and assessment. Blends scientific content, pedagogy, and practical applications.
Requisites: Requires corequisite courses of EDUC 4331 and 4341. Restricted to Elementary Education (EDEL) majors only.
Additional Information: Departmental Category: Elementary Education

EDUC 5222 (3) Language Study for Educators
Focuses on the nature of linguistic development and performance. Examines works that reflect a range of scholarly approaches to language study, explores language use both in and out of school, takes up the relationships between language practices and power and considers implications for classroom teaching.
Equivalent - Duplicate Degree Credit Not Granted: EDUC 4222
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5235 (3) Language and Literacy Across the Curriculum
Explores the relationship between language and learning in math and science classrooms with the goal of developing teaching practices that engage students in using language as a tool for understanding and constructing meaning across the curriculum. Explores how language/literacy take on different forms and functions in different social contexts and academic disciplines.
Equivalent - Duplicate Degree Credit Not Granted: EDUC 4232
Requisites: Restricted to EDCI, EECDD, EFPP, EPSY or REME graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5245 (3) Foundations of Reading Instruction K-12
Comparatively analyzes current and emerging philosophies and programs in K-12 with focus on teaching reading and thinking skills.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5255 (3) Digital Literacies and New Media
Engage in digital reading and writing experiences using tools for communication, collaboration, design and research. Students will discuss and critically reflect on the role of technology in literacy instruction, grounded on learning and literacy theories. Connections to English language arts include genre study of literary and nonfiction texts and using quality children's literature as mentor texts for multimodal craft.
Requisites: Requires a prerequisite course of EDUC 5245 (minimum grade C-).
Grading Basis: Letter Grade
Additional Information: Departmental Category: Graduate Education

EDUC 5265 (3) Processes in Writing
Examines processes writers use from early ages to maturity by investigating current research related to writing curriculum, instruction, and policy. Includes opportunities for students to engage in inquiry related to writing curriculum and instruction in K-12 classrooms.
Requisites: Restricted to Educ-Curriculum Instruction (EDCI) graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5275 (3) Assessment in Literacy
Assumes an interactive model of reading and supports the perspective of assessment as interrelated with curriculum and instruction; examines principles that guide the selection and interpretation of assessment strategies and tools, with a focus on students who are experiencing difficulties with literacy.
Requisites: Requires a prerequisite course of EDUC 5245 (minimum grade C). Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5285 (3) Reading Clinic Procedures K-12
Explores the relationship between language and learning in math and science classrooms with the goal of developing teaching practices that engage students in using language as a tool for understanding and constructing meaning across the curriculum. Explores how language/literacy take on different forms and functions in different social contexts and academic disciplines.
Equivalent - Duplicate Degree Credit Not Granted: EDUC 4232
Requisites: Restricted to EDCI majors only.
Additional Information: Departmental Category: Graduate Education

EDUC 5295 (4) Reading and Literacy in the Secondary Classroom
Examines ways in which adolescents develop literacy through reading, writing, speaking, viewing and listening. Students learn to plan and organize literacy instruction based on ongoing assessment, to draw on and develop learner's linguistic skills related to reading, to support learner's reading comprehension skills and to support their learning through oral language development. Includes a school-based practicum experience.
Requisites: Requires a prerequisite course of EDUC 4342 or EDUC 5345. Restricted to EDCI majors only.
Additional Information: Departmental Category: Graduate Education

EDUC 5315 (3) Perspectives on Science
Explores contemporary ideas and issues in the history, philosophy and sociology of science education and science, science as a social and cultural activity and how contemporary issues in science relate to and impact educational practice.
Equivalent - Duplicate Degree Credit Not Granted: EDUC 4312
Additional Information: Departmental Category: Graduate Education
EDUC 5316 (3) Nature of Social Studies and Social Studies Education
Prepares teacher education candidates for teaching social studies in a social context. Participants will understand theoretical and developmental processes associated with social studies learning, methods for teaching social studies in a diverse society, and the integration of classroom instruction with the Colorado Academic Content Standards that foster such processes.

Requisites: Restricted to Educ-Curriculum Instruction (EDCI), Social Studies-Secondary Educ. (EDSS), Anthropology (ANTH), Economics (ECON), Geography (GEOG), History (HIST) or International Affairs (IAFS) majors only.

Additional Information: Departmental Category: Graduate Education

EDUC 5317 (3) Perspectives on Mathematics
Explores the historical development of mathematics as a human construct, and the relationship between the discipline and the contemporary school mathematics curriculum. Focuses on the sociology of mathematics education and how cultural traditions and societal needs influence the school mathematics curriculum and educational practice.

Additional Information: Departmental Category: Graduate Education

EDUC 5318 (3) The Nature of "English Language Arts"
Considers historical and ongoing controversies concerning the nature of "English" as an academic field of study and of "English Language arts" as a school subject. Integrates understandings of subject-matter specialization, of approaches to teaching this contested subject, and of the diverse learners that teachers seek to prepare for the 21st century literacies.

Equivalent - Duplicate Degree Credit Not Granted: EDUC 4318
Requisites: Restricted to graduate students only.

Additional Information: Departmental Category: Graduate Education

EDUC 5325 (3) Teaching Literature in Middle and Secondary Schools
Provides teachers of English with background and experiences relevant to using reading, writing, and a range of other classroom social languages to teach literature to a culturally and intellectually diverse population of students. Explores relevant literary theories, texts, and genres, and examines contemporary and historical perspectives on the meaning and function of stories in both personal and democratic public life.

Requisites: Restricted to Educ-Curriculum Instruction (EDCI), English - Secondary Education (EDEN), or Social Studies-Secondary Educ. (EDSS) majors only.

Additional Information: Departmental Category: Graduate Education

EDUC 5345 (4) Writing in Humanities Classrooms
Fosters understandings of diverse students’ writing processes and the development of a repertoire of research-based teaching practices. Emphasizes writing as a tool for both developing and communicating understandings across a range of settings.

Equivalent - Duplicate Degree Credit Not Granted: EDUC 4342
Requisites: Requires a corequisite course of EDUC 4295 or EDUC 5295. Restricted to EDCI majors only.

Additional Information: Departmental Category: Graduate Education

EDUC 5355 (3-4) Methods and Materials in Secondary Social Studies
Focuses on curriculum, materials, methods, assessment, and related aspects of instruction. Introduces best practices in teaching the social studies in middle and high schools. Examines the Colorado Academic Content Standards.

Requisites: Requires a prerequisite course of EDUC 4295 or EDUC 5295 and EDUC 5325 (all minimum grade C-). Restricted to Educ-Curriculum Instruction (EDCI) or Social Studies-Secondary Educ. (EDSS) majors only.

Recommended: Corequisite EDUC 4023.

Additional Information: Departmental Category: Graduate Education

EDUC 5365 (3-4) Methods and Materials in Secondary English
Focuses on curriculum, materials, methods, and assessment. Introduces best practices in the teaching of English in middle and high schools. Examines the Colorado Academic Content Standards.

Requisites: Requires a prerequisite course of EDUC 4295 or EDUC 5295 and EDUC 5325 (all minimum grade C-). Restricted to Educ-Curriculum Instruction (EDCI) or English - Secondary Education (EDEN) majors only.

Recommended: Corequisite EDUC 4023.

Additional Information: Departmental Category: Graduate Education

EDUC 5375 (3-4) Problem-Based Math Instruction
Focuses on curriculum, materials, methods and assessment, and related aspects of instruction. Introduces best practices in teaching mathematics in middle and high schools. Students are required to work in a classroom 4 hours per week. Examines the Colorado Academic Content Standards.

Requisites: Restricted to EDCI, EDSC, or EDMA majors only.

Recommended: Corequisite EDUC 4023.

Additional Information: Departmental Category: Graduate Education

EDUC 5385 (3-4) Problem-Based Science Instruction
Focuses on curriculum, materials, methods, assessment, and related aspects of instruction. Introduces best practices in teaching science in middle and high schools. Students are required to work in a classroom 4 hours per week. Examines the Colorado Academic Content Standards.

Equivalent - Duplicate Degree Credit Not Granted: EDUC 4425
Requisites: Restricted to graduate students only.

Additional Information: Departmental Category: Graduate Education

EDUC 5425 (3) Introduction to Bilingual/Multicultural Education
Provides a comprehensive survey of bilingual-multicultural education programs for language minority students. Includes an overview of the history and legislation related to bilingual education and English as a second language. Presents various models, philosophies, and theoretical underpinnings of bilingual education and ESL.

Equivalent - Duplicate Degree Credit Not Granted: EDUC 4425
Requisites: Restricted to graduate students only.

Additional Information: Departmental Category: Graduate Education

EDUC 5435 (3) Materials and Methods in Bilingual/ Multicultural Education
Provides an in-depth study of the curriculum options available for bilingual and ESL programs. Presents, reviews, and critiques specific methods and strategies for teaching language to minority students. Gives the opportunity to develop and present teaching units in Spanish or in ESL methodology, as appropriate.

Requisites: Requires a prerequisite course of EDUC 5425 (minimum grade C-).

Additional Information: Departmental Category: Graduate Education

EDUC 5445 (3) Curriculum for Multicultural Education
Analyzes curriculum programs and examines principles that inform innovation for education of diverse students at all school levels. Includes topics of ethnic, racial, socio-economic, linguistic, and gender diversity.

Additional Information: Departmental Category: Graduate Education

EDUC 5455 (3) Literacy for Linguistically Different Learners
Presents current and emerging philosophies and methods on teaching reading to culturally diverse second-language learners. Includes review of materials, strategies for teaching reading and writing skills, and important considerations for transference from L1 to L2 reading.

Requisites: Requires a prerequisite course of EDUC 5425 (minimum grade C-).

Additional Information: Departmental Category: Graduate Education
### Programs of Study

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Requisites</th>
<th>Additional Information</th>
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<tbody>
<tr>
<td>EDUC 5460</td>
<td>(3) Teaching and Learning Physics</td>
<td>Learn how people understand key concepts in physics. Through examination of physics content, pedagogy and problems, through teaching, and through research in physics education, students will explore the meaning and means of teaching physics. Students will gain a deeper understanding of how education research is done and how people learn. Useful for all students, especially for those interested in physics, teaching, and education research.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
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<tr>
<td>PHYS 4460</td>
<td>and PHYS 5460</td>
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<tr>
<td>EDUC 5465</td>
<td>(3) Introduction to ESL/Bilingual and Special Education</td>
<td>Provides students with the fundamental information of ESL, bilingual and special education, including theories, assumptions, philosophies, and paradigms of bilingual and special education. Discusses successful teaching techniques and instructional approaches, including individualization, least restrictive environment, transition, and career education.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5485</td>
<td>(3) Differentiation in the Classroom</td>
<td>Focuses on teaching culturally and linguistically diverse students, special education students, and differentiation in the classroom. Emphasizes evidence-based teaching practices, programmatic interventions that support student learning and using research to inform practice. Includes practicum. Department enforced prerequisite: restricted to MA+ students.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5505</td>
<td>(3) Education of Students with Learning and Behavior Disorders</td>
<td>Discusses unique learning needs of students with learning and behavior disorders. Emphasizes development of a systems model for diagnosis, programming, and remediation. Stresses data-based individualization of instruction, with emphasis on intervention in inclusive learning environments and developing a culturally responsive system.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5515</td>
<td>(3) Curriculum and Assessment for Special Learners</td>
<td>Emphasizes assessment of special education students from pre-referral through staffing and placement, including response to intervention, research-based assessment practices, analytic teaching and assessment, curriculum-based assessment and measurement. Selection, administration, and interpretation of formal and informal assessment devices are studied, with particular emphasis on cultural relevance and equity in assessment for special learners with mild to severe needs.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5525</td>
<td>(3) Research Issues in Special Education</td>
<td>Provides practical experience in the review, critique, conceptualization, and writing of research studies in special education. Also offers experience in design of evaluation systems for classroom practice.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5535</td>
<td>(3) Diagnostic Testing in ESL and Bilingual Education</td>
<td>Promotes critical uses of assessment instruments and information. Provides methods for educators to incorporate assessment as a meaningful activity in the classroom intended to support learning among bilingual students. Examines effectiveness, validity, and fairness in the testing of linguistically diverse populations. Provides first-hand experiences developing, selecting, reviewing, and adapting test materials as critical to making informed teaching decisions.</td>
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<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5545</td>
<td>(3) Strategies for Teaching Students with Special Needs</td>
<td>Provides teachers with specific evidence-based methods and techniques for teaching students with a wide variety of high and low disabilities including learning and language disabilities, hearing and visual impairments, physical disabilities, and health impairments. Emphasizes different teaching methods, instructional materials, and learning strategies that have proven effective working students with cognitive learning needs.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5555</td>
<td>(3-4) Practicum in Bilingual/Special Education</td>
<td>Offers supervised field experience in elementary and secondary special education class settings. Each credit hour requires 50 contact hours. Requires prerequisite courses of EDUC 5465 and EDUC 5505 and EDUC 5515 or EDUC 5545 (all minimum grade C). Restricted to graduate students only.</td>
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<td>Departmental Category: Graduate Education</td>
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<tr>
<td>EDUC 5575</td>
<td>(1-4) Workshop in Curriculum and Instruction</td>
<td>Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.</td>
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<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5580</td>
<td>(3) Physics and Everyday Thinking</td>
<td>Engages non-physics majors in hands-on, minds-on activities and labs to investigate the physical world, the nature of science, and how science knowledge is constructed. This introductory course is especially relevant for future elementary and middle school teachers although it will meet the needs of most non-physics and non-science majors. Physics content focuses on interactions and energy.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
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<tr>
<td>EDUC 5595</td>
<td>(1-4) Practicum in Linguistically Different: English as a Second Language</td>
<td>University supervised, school-based field experience teaching linguistically different students, as well as assistance in the completion of EECD portfolio. Requires prerequisite courses of EDUC 5425 and EDUC 5435 and EDUC 5535 (all minimum grade C). Restricted to graduate students only.</td>
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<td>Departmental Category: Graduate Education</td>
</tr>
<tr>
<td>EDUC 5605</td>
<td>(3) Research Issues in Bilingual Education</td>
<td>Offers practical experience in the review, critique, conceptualization, and writing of research studies in bilingual/ESL education. Provides experience in the design of classroom evaluation systems. Requires a prerequisite course of EDUC 5245 (minimum grade C). Restricted to graduate students only.</td>
<td></td>
<td>Departmental Category: Graduate Education</td>
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EDUC 5610 (1-3) Math and Science Education
Introduces learning theory and teaching practices for mathematics and science learning assistants. Presents theoretical issues such as conceptual development, questioning techniques, cooperative learning, nature of math/science, and argumentation in mathematics and science.
Additional Information: Departmental Category: Graduate Education

EDUC 5615 (3) Second Language Acquisition
Presents a broad survey of second-language acquisition research. Stresses theoretical concerns and research findings and practical applications to teaching second languages. Gives special emphasis to second-language acquisition.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5625 (3) Methods of Teaching English as a Second Language
Exposes students to strategies used to teach English as a second or foreign language. Covers both theoretical and applied aspects of language learning and teaching. Exposes students to techniques, activities, strategies and resources to plan instruction for students learning English as a second language. Emphasizes oral language development, literacy and content-area instruction for teaching K-12 students.
Recommended: Prerequisite EDUC 5615.
Additional Information: Departmental Category: Graduate Education

EDUC 5635 (3) Education and Sociolinguistics
Explores the discipline of sociolinguistics, the study of language variation and use, and its application within education settings. Not designed as an advanced sociology or linguistics course. Areas of study include language variation, speech communities, the ethnography of communication, speech and social identities, and sociolinguistic research related to teaching and learning.
Additional Information: Departmental Category: Graduate Education

EDUC 5706 (3) Assessment in Mathematics and Science Education
Examines purposes and practices of assessment in mathematics and science education. Particular attention is given to application of theoretical foundations and contemporary research in the design and use of assessment techniques and tools to support teaching for student understanding. Addresses the role of effective formative assessment in teaching and learning.
Additional Information: Departmental Category: Graduate Education

EDUC 5716 (3) Basic Statistical Methods
Introduces descriptive statistics including graphic presentation of data, measures of central tendency and variability, correlation and prediction, and basic inferential statistics, including the t-test.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5726 (3) Introduction to Disciplined Inquiry
Considers various research approaches and methodologies included in education including experimental and quasi-experimental methods; anthropological and case study methods; evaluative research and field studies; correlational; and sociological, historical, and philosophical research. Topics include library research, research criticism, research design, and proposal writing.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 5810 (3) Teaching K-12 Mathematics: Number Sense
Provides teachers opportunity to explore fundamental mathematical theories and pedagogical perspectives pertaining to the teaching and learning of number and operation. Engages students in explorations of mathematical content underlying number and operations, while highlighting relevant problem solving, reasoning and proof, and mathematical connections. Explores implications of teachers’ mathematical learning on their classroom teaching. Develops practices supporting learner’s number sense development.
Additional Information: Departmental Category: Graduate Education

EDUC 5820 (3) Teaching K-12 Mathematics: Algebraic Thinking
Uses reform-based mathematics curricula to engage participants in algebraic thinking, to reflect on their own knowledge of algebraic concepts, and to examine pedagogical ideas that can foster K-12 students’ algebraic thinking and learning. Algebraic topics include patterning, variable, functions, multiple representations, equality, and solving linear and systems of equations.
Additional Information: Departmental Category: Graduate Education

EDUC 5822 (3) Teaching and Learning Chemistry
Explores issues related to how people learn and teach chemistry. Reviews high school and early college chemistry concepts both from the content and pedagogical perspectives. Delves into the chemistry education research, education, psychology and cognitive science literature. Provides an opportunity to observe and/or teach K-12 or college chemistry classes.
Requisites: Requires prerequisite course of CHEM 1133 or CHEM 2100 or CHEM 1371 (minimum grade C).
Additional Information: Departmental Category: Graduate Education

EDUC 5830 (3) Teaching K-12 Mathematics: Geometry & Measurement
Provides an opportunity to explore how to foster geometric thinking while examining fundamental mathematical theory underlying the content area of geometry and measurement. Emphasizes investigative approach involving problem solving, reasoning, connections, and communication as well as learning mathematics content in a flexible and conceptual way. Challenges participants to apply their understanding to teaching practices that foster geometric thinking in K-12 learners.
Additional Information: Departmental Category: Graduate Education

EDUC 5833 (3) Teaching and Learning Earth Systems
Learn and develop pedagogically effective strategies for teaching and understanding Earth Science concepts. Particular emphasis is placed on understanding the importance of geoscience habits of mind (i.e. spatial/temporal reasoning, multiple working hypotheses, geographic context). The course focuses upon inquiry and evaluation of evidence, the importance of background knowledge and misconceptions and developing effective discourse within and outside the classroom.
Grading Basis: Letter Grade
Additional Information: Departmental Category: Graduate Education

EDUC 5840 (3) Teaching K-12 Mathematics: Probability & Statistics
Focuses on teaching probability, data analysis, and statistics in K-12 classrooms. Explores curriculum and assessment strategies in the areas of probability and statistics. Examines research on students’ thinking on stochastic tasks and how this research informs teaching practice. Emphasizes deepening of one’s conceptual understanding of probability and statistics and their importance in the current information age.
Additional Information: Departmental Category: Graduate Education
EDUC 6210 (3) Education Policy and the Law
Approaches education policy issues through the rich history of litigation and current legal challenges facing American K-12 schooling. Builds an understanding of the legal and policy development of the American schooling system, particularly in the 20th century. Laws and legal cases will be used as jumping-off points for broader discussions.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 6220 (3) Gender Issues in Education
Provides a strong foundation in the various issues of gender and sexual diversity in education. Stimulates explorations into the ways the construct of "gender" affects and is affected by the educational system and process. Presents theory and research about contemporary educational issues related to sexism and homophobia. Encourages development of well-considered views about the various issues, research, and theories.
Additional Information: Departmental Category: Graduate Education

EDUC 6230 (3) Ethics in Education
Investigates controversies in education from a self-consciously ethical perspective, drawing as appropriate from moral and political theory as well as law. Focuses on public education’s role in fostering democratic citizenship and providing equal educational opportunity. Critically evaluates various education reform policies and curriculum policies. Applies method commonly used in medical ethics to make decisions regarding concrete ethically problematic cases.
Additional Information: Departmental Category: Graduate Education

EDUC 6250 (3) Higher Education in the United States
Examines major issues in higher education focusing on the sociopolitical contexts in which US universities operate as gatekeepers to opportunities. Topics include the purposes and history of higher education in the United States, college teaching and learning, finance and governance, issues of access and equity related to race, gender, sexual orientation, gender identity, immigration status and class, and student life.
Grading Basis: Letter Grade

EDUC 6318 (3) Psychological Foundations of Education
Introduces students to theoretical and empirical contributions of educational and developmental psychology and the learning sciences emphasizing applications to educational practices. Topics include learning, development, cognitive processes, social and cultural context, motivation, assessment and individual differences.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 6325 (3) Culture and Ethnography in Education
Applies anthropological perspectives to research in educational settings. Focuses on theories of culture, cultural transmission and acquisition, and cultural reproduction and production for understanding schooling and its outcomes.
Additional Information: Departmental Category: Graduate Education

EDUC 6328 (3) Advanced Child Growth and Educational Development
Introduces students to recent theoretical and research advances in the study of children and adolescent’s cognitive, social and emotional development, with an emphasis on implications for learning in and out of school.
Additional Information: Departmental Category: Graduate Education

EDUC 6368 (3) Adolescent Psychology and Development for Teachers
Examines current theory and research on adolescent development, learning, motivation, and academic achievement. Emphasizes how theory and research can inform instructional decisions in the secondary classroom.
Requisites: Restricted to English-Secondary Education (EDEN), Social Studies-Secondary Educ (EDSS), Mathematics-Secondary Educ (EDMA) or Science-Secondary Educ (EDSC) graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 6504 (3) Issues and Methods in Cognitive Science
Interdisciplinary introduction to cognitive science, examining ideas from cognitive psychology, philosophy, education, and linguistics via computational modeling and psychological experimentation. Department enforced prerequisite: graduate standing or at least one upper-division course in computer science, linguistics, philosophy, or psychology.
Equivalent - Duplicate Degree Credit Not Granted: CSCI 6402 and LING 6200 and PHIL 6310 and PSYC 6200 and SLHS 6402
Requisites: Restricted to graduate students only.

EDUC 6505 (1-2) Readings and Research in Cognitive Science
Interdisciplinary reading of innovative theories and methodologies of cognitive science. Share interdisciplinary perspectives through in-class and online discussion and analysis of controversial texts and of their own research in cognitive science. Required for joint PhD in cognitive science.
Requisites: Restricted to graduate students only.

EDUC 6506 (2) Cognitive Science Research Practicum
Independent, interdisciplinary research project in cognitive science for advanced graduate students pursuing a joint PhD in an approved core discipline and cognitive science. Research projects integrate at least two areas within the cognitive sciences: psychology, computer science, linguistics, education, philosophy. Students need commitments from two mentors for their project.
Equivalent - Duplicate Degree Credit Not Granted: CSCI 7412 and LING 7415 and PHIL 7415 and PSYC 7415 and SLHS 7418
Requisites: Requires prerequisite course of CSCI 6402 or EDUC 6504 or LING 6200 or PHIL 6310 or PSYC 6200 (minimum grade D-). Restricted to graduate students only.
Recommended: Prerequisite EDUC 6505.
Additional Information: Departmental Category: Graduate Education

EDUC 6516 (3) Issues and Methods in Cognitive Science
Interdisciplinary introduction to cognitive science, examining ideas from cognitive psychology, philosophy, education, and linguistics via computational modeling and psychological experimentation. Department enforced prerequisite: graduate standing or at least one upper-division course in computer science, linguistics, philosophy, or psychology.
Equivalent - Duplicate Degree Credit Not Granted: CSCI 6402 and LING 6200 and PHIL 6310 and PSYC 6200 and SLHS 6402
Requisites: Requires prerequisite course of CSCI 6402 or EDUC 6504 or LING 6200 or PHIL 6310 or PSYC 6200 (minimum grade D-). Restricted to graduate students only.

EDUC 6516 (2) Cognitive Science Research Practicum 2
Independent, interdisciplinary research project in cognitive science for advanced graduate students pursuing a joint PhD in an approved core disciplineand cognitive science. Research projects integrate at least two areas within the cognitive sciences: psychology, computer science, linguistics, education, philosophy. Students need commitments from two mentors for their project.
Equivalent - Duplicate Degree Credit Not Granted: CSCI 7412 and LING 7425 and PHIL 7425 and PSYC 7425 and SLHS 7428
Requisites: Requires prerequisite course of LING 7415 or PSYC 7415 or CSCI 7412 or EDUC 6506 (minimum grade D-). Restricted to graduate students only.

EDUC 6517 (1-5) Cognitive Science Research Practicum 3
Independent, interdisciplinary research project in cognitive science for advanced graduate students pursuing a joint PhD in an approved core disciplineand cognitive science. Research projects integrate at least two areas within the cognitive sciences: psychology, computer science, linguistics, education, philosophy. Students need commitments from two mentors for their project.
Equivalent - Duplicate Degree Credit Not Granted: CSCI 7422 and LING 7425 and PHIL 7425 and PSYC 7425 and SLHS 7428
Requisites: Requires prerequisite course of LING 7415 or PSYC 7415 or CSCI 7412 or EDUC 6506 (minimum grade D-). Restricted to graduate students only.

EDUC 6804 (1-4) Special Topics
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6811 (3) Teaching and Learning Biology
Provides an introduction to recent research into student learning on the conceptual foundations of modern biology, together with pedagogical methods associated with effective instruction and its evaluation. Students will be involved in active research into conceptual and practical issues involved in biology education, methods to discover student preconceptions, and the design, testing and evaluation of various instructional interventions.
Equivalent - Duplicate Degree Credit Not Granted: EDUC 4811 and MCDB 4811 and MCDB 5811
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education
EDUC 6844 (1-4) Master's Independent Study
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6855 (1-4) Independent Study in Curriculum and Instruction---Master's Level
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6877 (1-4) Independent Study in Educational Equity & Cultural Diversity: Master's Level
An independent study may be established between a student and a tenure track faculty member if both parties are amenable. The topics, readings and assignments will vary based upon mutually agreed upon goals. The student will be responsible for obtaining and submitting the necessary paperwork from/to the Office of Student Services in the School of Education. This is a variable credit course that ranges from 1 to 4 credits. The number of credits will be determined by the professor based on the workload.
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6888 (1-4) Independent Study in Educational and Psychological Studies---Master's Level
Repeatable: Repeatable for up to 8.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6899 (1-4) Independent Study in Educational Foundations Policy & Practice--Master's Level
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6915 (1-4) Practicum in Curriculum and Instruction
Repeatable: Repeatable for up to 4.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6916 (1-4) Practicum in Research and Evaluation Methodology
Additional Information: Departmental Category: Graduate Education
EDUC 6917 (1-4) Practicum in Educational Equity and Cultural Diversity
Repeatable: Repeatable for up to 4.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6918 (1-4) Practicum in Educational and Psychological Studies
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6919 (1-4) Practicum in Educational Foundations Policy and Practice
Repeatable: Repeatable for up to 4.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6925 (1-4) Readings in Curriculum and Instruction
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6926 (1-4) Readings in Research and Evaluation Methodology
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6927 (1-4) Readings in Educational Equity and Cultural Diversity
Five times per semester our faculty and PhD students gather to explore topics that are relevant to becoming a scholar and researcher in our field. All EECD PhD students are encouraged to attend; however, for first and second year PhD students attendance is required.
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6928 (1-4) Readings in Educational and Psychological Studies
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6929 (1-4) Readings in Educational Foundations Policy and Practice
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 6944 (1-3) Master's Degree Candidate
Repeatable: Repeatable for up to 12.00 total credit hours.
Grading Basis: Pass/Fail
Additional Information: Departmental Category: Graduate Education
EDUC 6954 (1-6) Master's Thesis
Repeatable: Repeatable for up to 6.00 total credit hours.
Additional Information: Departmental Category: Graduate Education
EDUC 6964 (3) Capstone: Inquiry in the Content Areas
Supports students in using and building on the ideas and content encountered in previous coursework. Requires students to conceptualize, design and implement an original research project that will serve as exit requirement for the degree. Reads and engages in research and theory associated with Teacher Research (i.e. research conducted by teachers for professional purposes).
Requisites: Restricted to Educ-Curriculum Instruction (EDCI) graduate students only.
Additional Information: Departmental Category: Graduate Education
EDUC 7015 (3) Teaching Internship in Teacher Education
One-semester teaching internship in an undergraduate or graduate foundations course.
Additional Information: Departmental Category: Graduate Education
EDUC 7055 (3) Philosophy of Education
Examines exemplars of educational philosophy from ancient times to the present day, emphasizing their relevance and application to current controversies in education (e.g., free speech, multiculturalism, and affirmative action). Formerly EDUC 5055.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education
EDUC 7105 (3) Collaboration to Meet Special Needs
Covers effective collaboration practices involving the special education teacher, other educational personnel, students, and parents. Bilingual special education considerations in collaboration will be described. Issues regarding inclusion will be explored. Practical application to teaching and learning will be made. Strategies for disseminating information and collaborative activities will be discussed.
Additional Information: Departmental Category: Graduate Education

EDUC 7316 (3) Intermediate Statistical Methods
Studies sampling theory and inferential statistics; advanced applications for testing of hypotheses regarding central tendency, variability, proportion, correlation, and normality; chi-square and the analysis of frequency data; multiple regression and prediction; introduction to the analysis of variance; and related computer programs for statistical analysis.
Requisites: Requires prerequisite course of EDUC 5716 (minimum grade D-).
Additional Information: Departmental Category: Graduate Education

EDUC 7326 (3) Quasi-Experimental Design in Causal Inference in Social Sciences
Focuses on experimental and quasi-experimental designs in educational research; applications of the general linear mode; power and statistical efficiency; randomization and control; multiple comparisons; factorial experiments and interaction with fixed-factor and mixed design; analysis of covariance; effects of assumption violations; and related computer programs for statistical analysis.
Additional Information: Departmental Category: Graduate Education

EDUC 7336 (3) Methods of Survey Research and Assessments
Examines theory and techniques involved in each stage of survey research, including problem formulation, questionnaire development, interview and mailed surveys, assessing reliability and validity, sampling plans, data reduction (e.g., factor analysis), and analysis of continuous and categorical data.
Requisites: Requires prerequisite courses of EDUC 5726 and EDUC 7316 (all minimum grade D-).
Additional Information: Departmental Category: Graduate Education

EDUC 7346 (3) Ethnographic Methods in Educational Research
Explores the history of ethnography and its translation into educational research. Students practice participant observation, interviewing, journal writing, artifact searches, qualitative analysis and interpretation, and styles of reporting.
Requisites: Requires a prerequisite course of EDUC 6325 (minimum grade C-).
Additional Information: Departmental Category: Graduate Education

EDUC 7376 (3) Theory and Practice of Educational and Psychological Measurement
Introduces theories of measurement and applications, and presents classical test theory. Includes quantitative concepts, methods, and computational techniques for the development, application, and evaluation of measurement instruments in social/ behavioral science and education.
Requisites: Requires prerequisite course of EDUC 5716 (minimum grade D-).
Additional Information: Departmental Category: Graduate Education

EDUC 7386 (3) Educational Evaluation
Builds an understanding of the range of approaches taken by educational evaluators, focusing particularly on the evaluation of programs. Explores the nature of different evaluation perspectives and how these disparate views translate into methodological and conceptual models. Students develop a familiarity with the most common and influential approaches to evaluation.
Additional Information: Departmental Category: Graduate Education

EDUC 7396 (3) Categorical Data Analysis
Introduces contemporary advanced multivariate techniques and their application in social science research. Methods include multivariate regression and analysis of variance, structural equation models, and factor analysis. Prior experience with Anova and multiple regression is assumed.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 7416 (3) Seminar: Research Methodology
Presents selected topics for advanced study in educational research, statistics, measurement, and evaluation.
Repeatable: Repeatable for up to 12.00 total credit hours.
Additional Information: Departmental Category: Graduate Education

EDUC 7436 (3) Item Response Theory
Includes one-, two-, and three-parameter logistic models for dichotomously-scored items and partial credit models for polychotomously-scored items; applications of the models to problems such as equating of test forms, test design, computerized adaptive testing, and the detection of item bias.
Requisites: Requires prerequisite courses of EDUC 7316 and EDUC 7376 (all minimum grade D-).
Additional Information: Departmental Category: Graduate Education

EDUC 7446 (3) Seminar: Policy Issues in Education
Explores major policy issues confronting U.S. education and examines the nature and undertaking of educational policy studies. Learn to approach policy issues from a contextual perspective that highlights systemic forces and analyzes and applies differing policy instruments. While a wide variety of policies are covered in the course, it particularly emphasizes issues of educational equity.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 7456 (3) Multilevel Modeling
Covers in depth two advanced multivariate models common to social science research: latent variable (structural equation) models and multi-level (hierarchical) models. Topics may be taught with a particular analytic context, such as measurement of change (longitudinal analysis) or experimental design.
Additional Information: Departmental Category: Graduate Education

EDUC 7775 (1) Topics in Cognitive Science
Reading of interdisciplinary innovative theories and methodologies of cognitive science. Students participate in the ICS Distinguished Speakers series that hosts internationally recognized cognitive scientists who share and discuss their current research. Session discussions include analysis of leading edge and controversial new approaches in cognitive science.
Equivalent - Duplicate Degree Credit Not Granted: CSCI 7772 and LING 7775 and PHIL 7810 and PSYC 7775 and SLHS 7775
Repeatable: Repeatable for up to 4.00 total credit hours.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education
EDUC 8014 (3) Advanced Seminar in Democracy, Diversity and Social Justice
Addresses the sociopolitical context of multiculturalism and education, and the sociocultural context of learning. Examines critical issues involved in making schooling responsive to an increasingly multicultural and multilingual society.
Repeatability: Repeatable for up to 9.00 total credit hours.
Requisites: Requires prerequisite course of EDUC 8210 (minimum grade B-). Restricted to EDCI, EECD, EPSY, EFPP or REME PhD graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8025 (3) Seminar: Curriculum Theories
Examines in depth recent developments in curriculum theory highlighting conceptual, contextual, and normative issues. Substantially explores distinct curricular traditions, corresponding conceptions of the good life along with related approaches to reason and emotion. Focuses on the works of prominent curriculum theorists.
Additional Information: Departmental Category: Graduate Education

EDUC 8045 (3) Philosophical Issues in Educational Research
Familiarizes students with important concepts and issues from the philosophy of science and, to a lesser extent, political theory and ethics. Grounds such concepts and issues in the literature (often in terms of primary philosophical sources); and stimulates students to apply this material to the field of educational research in an informed way.
Requisites: Restricted to PhD students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8055 (3) Theoretical Issues in Education Policy
Provides students with an examination of the theories behind education policy analysis. Takes a thematic approach to the study of policy in order to understand how policy agendas are set; how democratic deliberation should be linked with research and policy; and the relationship between politics, media, social structures, research and policies.
Requisites: Restricted to PhD students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8125 (3) Seminar: Radical Education Theories
Examines radical analyses of schooling, based on class, gender, sexual identity and race, through which U.S. public schooling is said to maintain dynamics of oppression and domination that undermines the schools’ democratic premise. Scrutinizes the conceptual framework, interpretive and explanatory adequacy, and ethical justification of radical claims.
Additional Information: Departmental Category: Graduate Education

EDUC 8135 (3) Seminar: Research on Teaching
Provides an historical perspective of research on teaching, focusing on the evolution of conceptual frameworks, research methods, and research findings. Examines substantive and methodological issues that underlie contemporary research on teaching. Explores areas of research including teacher knowledge and beliefs, teaching for understanding, understanding student thinking, motivation and volition, and classroom assessment.
Additional Information: Departmental Category: Graduate Education

EDUC 8145 (3) Seminar: Research on Teacher Education and Learning to Teach
Explores substantive and methodological issues that underlie current research on learning to teach, teacher education, and teacher professional development. Considers the learning and development of experienced and novice teachers, with an emphasis on learning to teach in ways that conform to reform-based educational ideas.
Additional Information: Departmental Category: Graduate Education

EDUC 8155 (3) Advanced Topics in Literacy Education
Examines special topics in theory and research related to literacy and literacy education. Topics vary each semester.
Repeatability: Repeatable for up to 12.00 total credit hours.
Additional Information: Departmental Category: Graduate Education

EDUC 8165 (3) Advanced Topics in Mathematics Education
Examines special topics in theory and research related to mathematics education. Topics vary each semester.
Repeatability: Repeatable for up to 12.00 total credit hours.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8175 (3) Advanced Topics in Science Education
Engages participants in the process of curriculum development. Principles that guide the development of curricula and learning environments are discussed as they integrate with learning theory. Participants develop and/or test specific activities in the classroom and modify them as a result. There is a particular focus on incorporating the practices of the discipline into each content-based activity.
Repeatability: Repeatable for up to 12.00 total credit hours.
Additional Information: Departmental Category: Graduate Education

EDUC 8210 (3) Perspectives on Classroom Teaching and Learning
Introduces students to various theoretical perspectives informing educational research and how they are employed to study teaching, learning, and policy in K-12 classrooms. Includes reading and discussion related to the assumptions, questions, methods, and findings associated with theoretical traditions within and across disciplines.
Requisites: Restricted to EDCI, EECD, EPSY, EFPP or REME PhD graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8220 (3) Introduction to Educational Research and Policy
Introduces conceptual and empirical issues and controversies in educational research and policy. Complements other EDUC doctoral courses in quantitative and qualitative methodology.
Requisites: Restricted to PhD students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8230 (3) Quantitative Methods I
Explores the use of statistics to formalize research design in educational research. Introduces descriptive statistics, linear regression, probability, and the basics of statistical inference. Includes instruction in the use of statistical software, (e.g., SPSS.).
Requisites: Restricted to EDCI, EECD, EPSY, EFPP or REME PhD graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8240 (3) Quantitative Methods II
Continues the exploration of research design in the social sciences, especially the evaluation of the quantitative research reported in professional journals. Introduces instances of the general linear model (both multiple regression and ANOVA) and its application to educational research.
Requisites: Requires prerequisite course of EDUC 8230 (minimum grade D-). Restricted to EDCI, EECD, EPSY, EFPP or REME PhD graduate students only.
Additional Information: Departmental Category: Graduate Education
EDUC 8250 (3) Qualitative Methods I
Introduces students to the theory and practice of qualitative research in education. First of a two-course sequence covering research design, theoretical perspectives, and methods. Preference given to first-year doctoral students in education.
Requisites: Restricted to EDCI, EECD, EPSY, EFPP or REME PhD graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8260 (3) Qualitative Methods II
Builds on EDUC 8250 to develop knowledge and skills in ethnographic and case study research. Second of a two-course sequence covering qualitative research design, theoretical perspectives, and methods.
Requisites: Restricted to EDCI, EECD, EPSY, EFPP or REME PhD graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8348 (3) Seminar: Human Development
Intensive study of selected topics in human development. The focus of the seminar will vary depending on the instructor’s expertise and students’ interests. Recent topics include adolescent development in social context, Vygotsky and Cultural-Historical Activity Theory, and design-based research methods. Repeatable for credit up to 6 total credit hours.
Repeatable: Repeatable for up to 6.00 total credit hours.
Requisites: Restricted to graduate students only.
Recommended: Prerequisite EDUC 6318 or EDUC 8210 or instructor consent.
Additional Information: Departmental Category: Graduate Education

EDUC 8358 (3) Seminar: Human Learning
Intensive study of selected topics in human learning. The focus of the seminar will vary depending on the instructor’s expertise and students’ interest. Recent topics include sociocultural and social practice theories, STEM learning in and out of school. Repeatable for credit up to 6 total credit hours.
Repeatable: Repeatable for up to 6.00 total credit hours.
Recommended: Prerequisite EDUC 6318 or EDUC 8210 or instructor consent.
Additional Information: Departmental Category: Graduate Education

EDUC 8605 (3) Research and Professional Ethics for Educational Researchers
Examines the central issues and venerable theories of philosophical ethics that have historically framed research ethics. Also examines contemporary ethical theory that emphasizes a greater attention to the social sciences. Focuses on research ethics (both research of human subjects and research misconduct), various issues of professional academic ethics, and the AERA ethical code.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8610 (3) Advanced Topics in Educational Equity and Cultural Diversity
Examines special topics in theory and research related to educational equity and cultural diversity in education. Topics vary each semester.
Repeatable: Repeatable for up to 12.00 total credit hours.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8615 (3) Language Issues in Education Research
Examines ways in which issues of language can affect the validity of educational research. Discusses how language can be properly addressed with a multidisciplinary perspective through different stages in the process of an investigation, including design, sampling, data collection, and data analysis. Provides the conceptual basis for addressing linguistic diversity from a multidisciplinary perspective.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8710 (3) Measurement in Survey Research
Introduces students to classical test theory and item response theory. Emphasizes the process of developing, analyzing and validating a survey instrument. Focuses on developing a survey instrument with items that derive from a clearly delineated theory for the construct to be measured. Analyzes item responses and put together a validity argument to support the proposed uses of the survey.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8720 (3) Advanced Topics in Measurement
Focuses on psychometric models for measurement and their applications in educational and psychological research. Emphasizes understanding and evaluating the utility of models from item response theory (IRT). Applies and compares measurement models in the context of simulated or empirical data sets.
Recommended: Prerequisite EDUC 8710.
Additional Information: Departmental Category: Graduate Education

EDUC 8730 (3) Advanced Qualitative Data Analysis
Requires students begin semester with qualitative data already collected (from class project, pilot study, dissertation). Instructors present diverse methods of analyzing data and writing about interpretations. Instructors customize part of course to address specific topic of expertise, e.g., discourse analysis, video analysis, textual analysis, ethnographic analysis.
Repeatable: Repeatable for up to 12.00 total credit hours.
Additional Information: Departmental Category: Graduate Education

EDUC 8740 (3) Advances in the Assessment of Student Learning
Focuses on theories underlying traditional and contemporary proposals for assessment of student learning, and design and research of large-scale and classroom-based methods to assess student learning. Explores intersections between large-scale and classroom assessment, although greater attention is given to issues related to classroom assessment.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8804 (3) Special Topics
Designed to meet needs of graduate students with topics of pertinent interest.
Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8844 (1-4) Doctoral Independent Study
Repeatable: Repeatable for up to 8.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8855 (1-4) Independent Study in Curriculum and Instruction: Doctoral Level
Repeatable: Repeatable for up to 8.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education
EDUC 8866 (1-4) Independent Study in Research and Evaluation Methodology: Doctoral Level
Repeatability: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8877 (1-4) Independent Study in Educational Equity and Cultural Diversity: Doctoral Level
An independent study may be established between a doctoral student and a tenure track faculty member if both parties are amenable. The topics, readings and assignments will vary based upon mutually agreed upon goals. The student will be responsible for obtaining and submitting the necessary paperwork from/to the Office of Student Services in the School of Education. This is a variable credit course that ranges from 1 to 4 credits. The number of credits will be determined by the professor based on the workload.
Repeatability: Repeatable for up to 8.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8888 (1-4) Independent Study in Learning and Human Development: Doctoral Level
Repeatability: Repeatable for up to 8.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8899 (1-4) Independent Study in Educational Foundations Policy and Practice: Doctoral Level
Repeatability: Repeatable for up to 8.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8935 (1-6) Internship in Curriculum and Instruction
Repeatability: Repeatable for up to 24.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8936 (1-6) Internship in Research and Evaluation Methodology
Repeatability: Repeatable for up to 36.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8937 (1-6) Internship in Educational Equity and Cultural Diversity
Repeatability: Repeatable for up to 24.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8938 (1-6) Internship in Learning Sciences and Human Development
Repeatability: Repeatable for up to 24.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8939 (1-6) Internship in Educational Foundations Policy and Practice
Repeatability: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.
Additional Information: Departmental Category: Graduate Education

EDUC 8950 (3) Prospectus and Dissertation Writing
Provides students with ongoing opportunities to write social science research in the context of the design, analysis and data representation, development, and write-up of students’ dissertation proposals and dissertations. Students will learn to expand how they think about and use evidence, clarify their ideas and arguments, and improve their writing. Students working on proposals and dissertations should enroll.
Repeatability: Repeatable for up to 6.00 total credit hours.
Requisites: Restricted to EDCI, EECD, EPSY, EFPP or REME PhD graduate students only.
Additional Information: Departmental Category: Graduate Education

EDUC 8994 (1-10) PhD Doctoral Dissertation
Repeatability: Repeatable for up to 60.00 total credit hours.
Additional Information: Departmental Category: Graduate Education