<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>120</td>
<td>Seminar in Integrated Science for Elementary Schools</td>
<td>Spring. 1(1-1) Interdepartmental with Science and Mathematics Education. Administered by Science and Mathematics Education. P: BS 110 or BS 111 or CEM 141 or PHY 231 or PSL 250 or GLG 201 or GEO 203 R: Open only to students in the Integrated Science Teaching major, the Child Development major, the Elementary Teacher Education program, the 5th-year teacher certification program, or approval of college. Exploration of major connecting themes in life sciences, earth science, and physical science as evidence in the K-8 science curriculum and college science courses.</td>
</tr>
<tr>
<td>150</td>
<td>Reflections on Learning</td>
<td>Fall, Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Teacher Education. Students' experiences as learners in comparison to psychological, sociological, and anthropological theories and assumptions about learning and teaching in and out of school.</td>
</tr>
<tr>
<td>201</td>
<td>Current Issues in Education</td>
<td>Fall, Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Educational Administration. Administered by Teacher Education. Contemporary and perennial issues in elementary, secondary, and higher education.</td>
</tr>
<tr>
<td>250</td>
<td>Human Diversity, Power, and Opportunity in Social Institutions</td>
<td>Fall, Spring, Summer. 3(3-0) Comparative study of schools and other social institutions. Social construction and maintenance of diversity and inequity. Political, social and economic consequences for individuals and groups.</td>
</tr>
<tr>
<td>291A</td>
<td>Special Topics in Urban Education</td>
<td>Fall, Spring. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Freshman and sophomore students recruited into teaching in the College of Educations Urban Educators' Cohort Initiative. Issues in teaching and learning for prospective teachers. Strategies for professional development during and after one teacher preparation program.</td>
</tr>
<tr>
<td>301</td>
<td>Learners and Learning in Context - Elementary (W)</td>
<td>Fall, Spring, Summer. 4(3-4) P: (TE 150 and completion of Tier I writing requirement) and (TE 250 or CEP 240) R: Not open to freshmen or sophomores. Open only to students admitted to the elementary teacher certification program. Role of social context and sociocultural background in learning at the elementary level (K-8). Natural and socially constructed differences among learners. Relationship among subject-specific knowledge, teaching and learning that subject, and the institutional and communal context. Multiple literacies.</td>
</tr>
<tr>
<td>302</td>
<td>Learners and Learning in Context – Secondary (W)</td>
<td>Fall, Spring, Summer. 4(3-4) P: TE 150 and (TE 250 or CEP 240) and completion of Tier I writing requirement) R: Not open to freshmen or sophomores. Open only to students admitted to the secondary teacher certification program. Role of social context and sociocultural background in learning at the secondary level (7-12). Natural and socially constructed differences among learners. Relationship among subject-specific knowledge, teaching and learning that subject, and the institutional and communal context. Multiple literacies.</td>
</tr>
<tr>
<td>320</td>
<td>Integrated Science for Elementary Schools</td>
<td>Spring. 3(2-2) Interdepartmental with Science and Mathematics Education. Administered by Science and Mathematics Education. P: SME 120 and (BS 110 or LBS 144 or LBS 146 or BS 111 or LBS 145 or LBS 149 or PSL 250 or ZOL 355) and (PHY 231 or PHY 231B or CEM 141 or LBS 171) and (GLG 201 or GEO 203 or AST 207) R: Open only to students in the Integrated Science Elementary Teaching major. Not open to students with credit in SME 301. Analysis of the concepts integrating science across life sciences, earth sciences, and physical sciences. Applications to the K-8 science curriculum.</td>
</tr>
<tr>
<td>348</td>
<td>Reading and Responding to Children's Literature</td>
<td>Fall, Spring, Summer. 3(3-0) Literary understanding and genres in reading and teaching children's literature. Critical and theoretical perspectives in evaluating children's literature. Children's responses to literature. Literary, social, and pedagogical issues in the study of children's literature.</td>
</tr>
<tr>
<td>351</td>
<td>Urban Education</td>
<td>Spring of even years. 3(3-0) Teaching and learning in urban institutions. Urban school context and impact on schools. Urban school reform initiatives.</td>
</tr>
<tr>
<td>352</td>
<td>Immigrant Language and Culture</td>
<td>Fall, odd years. 3(3-0) Minority language communities and cultures. Family literacy issues and values. Emergent and adolescent literacy development. Parenting and parental involvement. Home-school connection. Family literacy programs.</td>
</tr>
<tr>
<td>353</td>
<td>International Education</td>
<td>Spring of even years. 3(3-0) Education in the global economy. Access and achievement, gender differences, pedagogy and culture, role of home and community, school resources, teacher quality and policy, policy challenges in developing countries, role of international organizations, privatization of higher education.</td>
</tr>
<tr>
<td>361</td>
<td>Educational Reform and Policy Analysis</td>
<td>Fall. 3(3-0) Interdepartmental with Educational Administration. Administered by Educational Administration. Analysis of prominent current K-12 and higher educational reforms and policies in the United States.</td>
</tr>
<tr>
<td>401</td>
<td>Teaching of Subject Matter to Diverse Learners – Elementary</td>
<td>Fall. 5(3-8) P: (TE 201 and TE 301 and TE 348) and completion of Tier I writing requirement RB: MTH 202 R: Not open to freshmen or sophomores. Open only to students admitted to the elementary teacher certification program. Examining teaching as enabling diverse learners at the elementary level (K-8) to inquire into and construct subject-specific meanings. Adapting subject matter to learner diversity. Exploring multiple ways diverse learners make sense of the curriculum.</td>
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<tr>
<td>402</td>
<td>Crafting Teaching Practice – Elementary (W)</td>
<td>Spring. 6(4-8) P: (TE 401 and completion of Tier I writing requirement R: Not open to freshmen or sophomores. Open only to students admitted to the elementary teacher certification program. Gathering data on learners to inform content and instructional decisions at the elementary level (K-8). Deciding what should be taught for specific disciplines. Teachers' multiple roles and their professional, intellectual, sociopolitical, and communal responsibilities.</td>
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<tr>
<td>407</td>
<td>Teaching Subject Matter to Diverse Learners – Secondary (W)</td>
<td>Fall. 5(3-8) P: (TE 301 or TE 302) or completion of Tier I writing requirement R: Not open to freshmen or sophomores. Open only to students admitted to the secondary teacher certification program. Examining teaching as enabling diverse learners to inquire into and construct subject-specific meanings at the secondary level (7-12). Adapting subject matter to learner diversity. Exploring multiple ways diverse learners make sense of the curriculum.</td>
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<tr>
<td>408</td>
<td>Crafting Teaching Practices – Secondary (W)</td>
<td>Spring. 6(4-8) P: (TE 407) and completion of Tier I writing requirement R: Not open to freshmen or sophomores. Open only to students admitted to the secondary teacher certification program. Gathering data on learners to inform content and instructional decisions. Deciding what should be taught for specific disciplines at the secondary level (7-12). Teachers' multiple roles and their professional, intellectual, sociopolitical, and communal responsibilities.</td>
</tr>
<tr>
<td>420</td>
<td>Integrated Science Research</td>
<td>Fall, Spring. 3(2-2) Interdepartmental with Science and Mathematics Education. Administered by Science and Mathematics Education. R: Open to seniors in the General Science Secondary Teaching Major and open to seniors in the Integrated Science Elementary Teaching Major. Research design and data analysis of individual research projects relevant to the K-12 science curriculum, integrating topics in life, earth, and physical science.</td>
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<tr>
<td>448</td>
<td>Issues of Diversity in Children's and Adolescent Literature</td>
<td>Fall, Spring, Summer. 3(3-0) P: TE 348 Theoretical perspectives, controversies, and classroom implications for literature by and about people who have traditionally been underrepresented in children's and adolescent literature. Literature by and about African Americans, Asian Americans, Latinos and Latinas, American Indians, Middle Eastern Americans, and groups traditionally defined by class, religion, ability, gender, and sexuality.</td>
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Teacher Education—TE

490 Independent Study in Teacher Education
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program. Approval of department. Supervised individual or small group study of the practice of teaching.

491 Special Topics in Teacher Education
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Open only to teacher certification candidates. Aspects of teaching practice and inquiry into practice.

494 Field Experience in Teacher Education
Fall, Spring. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Approval of department. Supervised practice and/or observations in educational settings.

495 Student Teaching in Music
Fall, Spring. 9 credits. Interdepartmental with Music. Administered by Music. R: Open to seniors in the Bachelor of Music in Music Education. Supervised music teaching experience in schools. On-campus seminar required.

501 Internship in Teaching Diverse Learners I
Fall, Spring. 6(2-4) P: TE 402 or TE 408 R: Open only to students seeking teacher certification. Directed and evaluated internship in heterogeneous classrooms. Teaching worthwhile content to students with varied learning needs. Theoretical and field-based explorations of common teaching dilemmas.

502 Internship in Teaching Diverse Learners II
Spring. 6(2-4) P: TE 501 R: Open only to students admitted to the Teacher Certification Internship-Year Studies Program. Not open to students with credit in CEP 502A or CEP 502C. Continuing internship in heterogeneous classrooms at selected schools. Increased emphasis on independent teaching. Maintaining classroom communities that ensure equitable access to important knowledge and skills. Assessing academic and social outcomes.

802 Reflection and Inquiry in Teaching Practice I
Fall. 3(2-3) P: TE 402 or TE 408 R: Open only to students admitted to the Teacher Certification Internship-Year Studies Program. Not open to students with credit in CEP 802A or CEP 802C. Qualitative and quantitative research methods on teaching and learning. Criteria for judging the validity and applicability of research-based knowledge. Framing educational problems worthy of inquiry. Designing and assessing studies of teaching practice.

803 Professional Roles and Teaching Practice II
Spring. 3(2-3) P: TE 801 R: Open only to students admitted to the Teacher Certification Internship-Year Studies Program. Not open to students with credit in CEP 803A or CEP 803C. School-agency alliances for fostering student learning. Strategies for working with families and community groups to improve responsiveness of the school curriculum to student needs. Child advocacy in the school and community.

804 Reflection and Inquiry in Teaching Practice II
Spring. 3(2-3) P: TE 802 R: Open only to students admitted to the Teacher Certification Internship-Year Studies Program. Not open to students with credit in CEP 804A or CEP 804C. Collecting, analyzing, and interpreting data on teaching, learning, and educational policy. Dilemmas surrounding research on practice. Appraising and reporting results of inquiry.

805 Learning Mathematics with Technology
Fall. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Counseling. Educational Psychology and Special Education. Current technologies for teaching and learning mathematics with understanding. Technology for multiple representations of mathematical ideas, modeling, and authentic learning environments. Psychological and mathematical perspectives on learning mathematics.

806 Learning Science with Technology
Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Counseling. Educational Psychology and Special Education. Possibilities, ideas, and issues associated with teaching science with technology. How K-12 teachers use Internet resources (e.g., simulations, databases, communities) to facilitate science learning. Contemporary conceptual perspectives from educational psychology on important issues of learning.

807 Professional Development and Inquiry
Fall, Summer. 3(3-0) Teacher-centered inquiry through autobiography and documentation of self as learner. Relationship of personal research to classroom-based research. Application to practice.

808 Inquiry into Classroom Teaching and Learning
Fall, Spring, Summer. 3(3-0) Alternative forms of classroom inquiry to improve teaching and learning of subject matter. Social context of teaching and learning, pedagogy, and teaching effects. Social and academic outcomes for diverse learners.

810 History of American Education
Spring of odd years. 3(3-0) Social and intellectual history of educational ideals and institutions. Legacies of reform initiatives. Evolution of the education profession.

811 Philosophical Inquiry and Contemporary Issues in Education
Fall, Spring. 3(3-0) Philosophies of education. Analytic tools used for evaluating current educational goals, practices, issues, and reforms.

812 Sociological Inquiry into Education
Spring of even years. 3(3-0) Relationships of educational organizations and practices to social structures and institutions.

813 Education, Development and Social Change
Spring of odd years. 3(3-0) Interdepartmental with Educational Administration. Administered by Educational Administration. Rise of modern systems of education in developed and developing countries. Education, the state, and national development. Colonial heritage, linkages, and globalization of educational development.

815 Comparative Analysis of Educational Practice
Fall of even years. 3(3-0) Cross-national comparison of educational practices in light of differences in culture, social organization, economic conditions, and historical circumstances. International perspectives on education in the United States. Borrowing and adapting educational practices.

816 Education in Transition
Fall of odd years. 3(3-0) Comparative analysis of change in educational concepts, policies, and practice.

818 Curriculum In Its Social Context
Fall, Spring. 3(3-0) Philosophical, social, and historical foundations of curriculum. Issues and practices across subjects, grades, and school settings. Moral consequences of curriculum decisions for teachers and students.

820 Power and Pluralism in School Practice
Spring of odd years. 3(3-0) Connections between schools and diversity, inequality, and power in society. Genesis and consequences of school policies for diverse learners.

821 Race and Educational Policy in the United States
Spring of even years. 3(3-0) Educational policy in relation to race in the United States. Efforts to promote equity through racially sensitive curricular and instructional practices.

822 Issues of Culture in Classroom and Curriculum
Fall of odd years. 3(3-0) Socio-cultural contexts and functions of schooling. Cultural diversity in education. Schools and classrooms as cultural systems. Students’ cultural backgrounds in relation to curriculum. Developing effective multicultural curricula for all students.

823 Learning Communities and Equity
Spring. 3(3-0) Cooperative grouping and heterogeneous learning teams. Impact of learning communities on equity and on school curricula.
Diverse Learners and Learning Subject Matter
Summer. 3(3-0)
Multiple perspectives on teaching subject matter to diverse learners. Texts, curricula, and pedagogical approaches. Subject-specific issues related to classroom diversity.

Evaluation of Educational Programs and Policies
Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Counseling, Educational Psychology and Special Education. RB: CEP 822
Qualitative and quantitative methods to assess the effectiveness of public policies and resulting educational programs. Theory and practice of program evaluation.

Designing Interdisciplinary Curricula
Spring of even years. 3(3-0)
Historical and conceptual analyses of ways to design, organize, and integrate curricula across subject areas. Evaluation and application of criteria for planning and teaching interdisciplinary curricula.

Teaching School Subject Matter with Technology
Fall. Spring. 3(3-0)
Uses of technologies in teaching subject matter to diverse learners. Critical perspectives on technologies in schools.

Theory and Research on the Teaching of Writing
Spring. 3(3-0) SA: TE 863D
Social, cognitive, and developmental perspectives on teaching writing. Implications for curriculum and instruction in middle and secondary schools.

Awards and Classics of Children’s Literature
Spring of even years. 3(3-0) RB: TE 849 SA: TE 883B
Critical examination of literary classics and award books for children, including children’s responses to this literature.

Proseminar I: Historical Bases of Literacy Instruction
Fall. 3(3-0) R: Open only to graduate students in Literacy Instruction.
Relationships between language processes and schooling.

Proseminar II: Psychological Bases of Literacy Instruction
Spring. 3(3-0) RB: TE 840 R: Open only to graduate students in Literacy Instruction.
Psychological foundations of literacy instruction, including theories and models of reading and writing. Psychological processes, social and contextual factors, and text features relevant to literacy instruction.

Advanced Methods of Elementary School Reading
Fall. Summer. 3(3-0)
Methods and materials for teaching developmental and content area reading in grades K-8.

Reading, Writing, and Reasoning in Secondary School Subjects
Spring. 3(3-0)
Knowledge and methodology for teaching language, literacy, and thinking in selected secondary school subjects.

Classroom Literacy Assessment
Summer. 3(3-0)
Knowledge and methodology about ongoing and summative types of classroom assessment in oral language, reading, and writing at the elementary and secondary levels.

Language Diversity and Literacy Instruction
Fall. 3(3-0) RB: One introductory linguistics course.
Acquisition of literacy in schools by language minority students and other learners with diverse backgrounds.

Accommodating Differences in Literacy Learners
Fall. Spring. Summer. 3(3-0) RB: Access to two K-12 students for course requirement to conduct two case studies.
Developmental processes, instructional practices, and assessment principles that contribute to effective learning of reading and writing. Teaching methods for accommodating the different needs of individual literacy learners.

Methods for Teaching Language Arts
Fall. 3(3-0)
Methods and materials for teaching listening, speaking, reading, and writing with emphasis on language development across the curriculum.

Methods of Writing Instruction
Spring of even years. 3(3-0) RB: TE 847 Rationale and methods for writing instruction from pre-writing through drafting and editing.

Methods and Materials for Teaching Children’s and Adolescent Literature
Fall of odd years, Summer of even years. 3(3-0) Evaluation and utilization of various genres and elements of literature with focus on literature for students in grades K-12.

Critical Reading for Children and Adolescents
Fall of even years. 3(3-0) P: TE 849 Teaching and learning of critical and aesthetic responses to literature for K-12 students.

Literacy for the Young Child in Home and School
Fall of odd years. 3(3-0) RB: TE 849 Literacy development in children from early infancy through age six, with emphasis on evaluation and utilization of writings for young children.

Corrective and Remedial Literacy Instruction in the Classroom
Fall. 3(3-0)
Causes and correlates of individual differences in literacy abilities, especially among disabled readers and writers. Individualized reading diagnosis and corrective treatment plans and procedures for K-12 students and/or adult/alternative classes.

Clinical Literacy Instruction
Spring of even years. 3(3-0) RB: TE 843 Clinical applications of corrective and remedial assessment and instruction for individuals with severe complex literacy problems. Assessment and treatment for students and/or adults with severe and complex reading/literacy and reading/literacy related difficulties.

Teaching School Mathematics
Fall. 3(3-0) RB: Two undergraduate mathematics courses.
Methods, materials, activities, and content important to teaching mathematics. Emphasis on conceptual understanding of mathematical ideas. Implications for lesson development, teaching diverse learners, and evaluating student learning.

Alternatives in School Mathematics Curriculum
Spring. Summer. 3(3-0) RB: Two undergraduate mathematics courses.
Selection and appraisal of mathematics curricula. Uses of materials in the classroom. Representation of selected mathematical content for diverse learners.

Teaching and Learning Mathematical Problem Solving
Spring. 3(3-0)
Teaching science subjects. Emphasis on learner diversity, learning community, conceptual understanding, subject matter content, and learners’ prior knowledge.

Teaching Science for Understanding
Spring. 3(3-0) RB: A teaching certificate with concentration in science teaching at elementary or secondary level. Enrollees should be teaching or otherwise have access to a classroom for the practical components of this course.
Responses to contemporary over-emphasis on memorization and coverage of content knowledge in science teaching. Theoretical knowledge, techniques, and practical skills necessary to teach science for understanding.

Inquiry, Nature of Science, and Science Teaching
Fall. 3(3-0) RB: A teaching certificate with concentration in science teaching at elementary or secondary level. Enrollees should be teaching or otherwise have access to a classroom for the practical components of this course.
Inquiry and the nature of science as part of current science education reforms. Theoretical knowledge and practical skills for including inquiry and the nature of science in science instruction

Action Research in K-12 Science and Mathematics Classrooms
Summer. 3(3-0) P: (TE 861A or concurrent-ly) or TE 861B RB: A teaching certificate with concentration in science teaching at elementary or secondary level. Enrollees should be teaching or otherwise have access to a classroom for the practical components of this course.
Philosophy and methods supporting action research in sciences and mathematics classrooms. Design and implementation of an action research project in student’s own setting. Analyzing, interpreting, and reporting project results. Reflection on study’s value.
865  **Teaching and Learning K-12 Social Studies**  
Fall. 3(3-0)  
Purposes for teaching and learning social studies. Developing citizenship, social science reasoning, and content knowledge with diverse learners.

866  **K-12 Social Studies Curriculum**  
Spring of odd years. 3(3-0)  
Issues and practices in social studies from historical, philosophical, and epistemological perspectives. Student diversity and the social studies curriculum. Reforms and needed research in social studies education.

867  **Perspectives in Social Studies: Global Education**  
Fall of odd years. Summer. 3(3-0)  
Issues affecting the global community. Educational strategies for developing a global perspective on human relationships and the environment.

868  **Perspectives in Social Studies: Law-Related Education**  
Summer. 3(3-0)  
Intellectual, social, and personal premises for law-related education. Strategies for curricular infusion.

870  **Curriculum Design, Development, and Deliberation in Schools**  
Fall, Spring, Summer. 3(3-0) P: (TE 807 or TE 808) and (TE 801 or TE 818)  
Simulation in group curriculum deliberation. Critique of curriculum discourse, process, and product. Teachers' roles in site-based curriculum and staff development.

872  **Teachers as Teacher Educators**  
Spring. 3(3-0) P: (TE 807 or TE 808) and (TE 801 or TE 818)  
Experienced teachers' contributions to the professional development of novice teachers. Implications for school change.

873  **Literacy Leadership**  
Spring of even years. 3(3-0)  
Leadership roles for teachers in developing and improving literacy programs at preschool, K-12, college, and adult education levels. Assessing local needs in the context of national and state professional standards for literacy instruction. Maximizing use of resources. Evaluating programs and communicating evaluation results.

877  **Community Literacy**  
Spring of even years. 3(3-0) Interdepartmental with Arts and Letters. Administered by Arts and Letters. R: Open only to doctoral students in the Rhetoric and Writing major or master's students in the Digital Rhetoric and Professional Writing major or graduate students in the Department of English or College of Education. Applied research in a community organization, non-profit agency, workplace, or school. Theories and designs of service learning pedagogies.

879  **Teaching College Mathematics**  
Fall of even years. 3(3-0)  
A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics Education. Administered by Science and Mathematics Education. RB: Past or concurrent mathematics teaching experience. Curriculum materials, case studies, approaches to teaching and student learning of particular mathematics topics.

882  **Seminars in Curriculum and Teaching**  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. Intensive study of selected topics in curriculum and teaching.

883  **Seminars in Literacy Instruction**  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. Intensive study of selected topics in literacy instruction.

891A  **Special Topics in Science Education**  
Summer. 1 to 4 credits. A student may earn a maximum of 15 credits in all enrollments for this course. Current special topics in various fields of teacher education.

891B  **Special Topics in Teaching, Curriculum, and Schooling**  
Fall, Spring. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. Supervised individual study in an area of curriculum, teaching, or schooling.

892  **ESL Classroom Practice: K-12 Literacy Instruction**  
Fall. 3(3-0) C: LTT 807 concurrently.  

894  **Laboratory and Field Experiences in Teaching, Curriculum, and Schooling**  
Fall, Spring. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. Supervised graduate practica and internships in curriculum, teaching, and schooling.

895  **Research Ethics**  
Summer. 1(1-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Educational Administration and Kinesiology. Administered by Kinesiology. R: Open to graduate students.  
SA: PES 895  

896  **ESL Practicum: K-12**  
Spring. 2(2-0) P: TE 882  
Syllabus and lesson plan development for a four-week English as a second language field experience in a K-12 setting.

899  **Master's Thesis Research**  
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Master's thesis research.

901  **Proseminar in Curriculum, Instruction, and Teacher Education I**  
Fall. 3(3-0) R: Open to doctoral students in the Curriculum, Instruction and Teacher Education major and open to doctoral students in the Educational Policy major. Purposes, history, structure, and reform and consequences of the K-12 educational enterprise. Teaching practice, student learning, curricula, and educational policy. Theories and interpretations of the educational system.

902  **Proseminar in Curriculum, Instruction, and Teacher Education II**  
Spring. 3(3-0) RB: TE 901 R: Open to doctoral students in the Curriculum, Instruction and Teacher Education major. Two historical episodes related to improving teaching practice, teacher and student learning, curricula, and educational policy. Nature and effects of educational reforms.

907  **Psychological Study of Teaching**  
Fall of odd years. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Counseling, Educational Psychology and Special Education. R: Open to doctoral students. Research literature on psychological aspects of teachers and teaching. Topics include teacher's decision-making, learning from experience, and developmental changes.

912  **Psychological and Cognitive Aspects of Literacy Learning**  
Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Counseling, Educational Psychology and Special Education. R: Open to doctoral students. Theory and research on psychological and cognitive aspects of literacy learning and use in sociocultural contexts.

913  **Psychology and Pedagogy of Mathematics**  
Fall of odd years. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Counseling, Educational Psychology and Special Education. RB: CEP 902 R: Open to doctoral students. Psychological theory and research on the learning of mathematics. Development of mathematical thinking and knowledge in school and other settings.

915  **Literacy, Learning and Development in Sociocultural Context**  
Fall. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Counseling, Educational Psychology and Special Education. R: Open to doctoral students. Role of language and literacy in mediating cognition, affect, and action in educational contexts. Relationship between orality and written discourse and sociocultural contexts.
975 Policy Perspectives on Teaching and Teacher Education
Fall of even years. 3(3-0)
Policy issues such as teacher accountability, teacher knowledge, and political influence.

982 Seminar in Curriculum, Instruction, and Teacher Education
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course.
Intensive study in an area of curriculum, teaching, and learning; educational policy and social analysis; or teacher education and teacher learning.

990 Independent Study
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open to doctoral students.
Supervised individual study in an area of curriculum, instruction, and teacher education.

991 Special Topics in Curriculum, Instruction, and Teacher Education
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course.
Special topics in the fields of curriculum, instruction, and teacher education.

991A Special Topics in Science Education
Spring of even years. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
Special topics in science education.

994 Laboratory and Field Experience in Curriculum, Instruction, and Teacher Education
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to doctoral students. Approval of department.
Supervised practica, observations, and internships in an area of educational policy and social analysis, teacher education and teacher learning, and curriculum, teaching and learning.

995 Research Practicum in Curriculum, Instruction, and Teacher Education
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to educational specialists or doctoral students in the Department of Teacher Education and open to students in the Educational Policy major.
Supervised research practicum. Design, execution, analysis, presentation, critique, and revision of research projects.

999 Doctoral Dissertation
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 100 credits in all enrollments for this course. R: Open to doctoral students in the Curriculum, Instruction and Teacher Education major and open to doctoral students in the Educational Policy major.
Doctoral dissertation research.