

TEACHER EDUCATION

TE

Department of Teacher Education College of Education

- 120 Seminar in Integrated Science for Elementary Schools**
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 Special Education 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 evidenced in the K-8 science curriculum and college science courses.
- 150 Reflections on Learning**
Fall, Spring, Summer. 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.
- 201 Current Issues in Education**
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.
- 250 Human Diversity, Power, and Opportunity in Social Institutions**
Fall, Spring, Summer. 3(3-0)
Comparative study of schools and other social institutions. Social construction and maintenance of diversity and inequality. Political, social and economic consequences for individuals and groups.
- 291A Special Topics in Urban Education**
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 ones teacher preparation program.
- 301 Learners and Learning in Context - Elementary (W)**
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.
- 302 Learners and Learning in Contexts – Secondary (W)**
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.
- 320 Integrated Science for Elementary Schools**
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 148 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.
- 348 Reading and Responding to Children's Literature**
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.
- 351 Urban Education**
Spring of even years. 3(3-0)
Teaching and learning in urban institutions. Urban context and impact on schools. Urban school reform initiatives.
- 352 Immigrant Language and Culture**
Spring of 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.
- 353 International Education**
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.
- 361 Educational Reform and Policy Analysis**
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.
- 401 Teaching of Subject Matter to Diverse Learners-Elementary**
Fall. 5(3-8) P: (MTH 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.
- 402 Crafting Teaching Practice - Elementary (W)**
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.
- 407 Teaching Subject Matter to Diverse Learners – Secondary (W)**
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.
- 408 Crafting Teaching Practices – Secondary (W)**
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.
- 420 Integrated Science Research**
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.
- 448 Issues of Diversity in Children's and Adolescent Literature**
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.

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 practica 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. 6(2-24) 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(2-24) 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.
- 801 Professional Roles and 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 801A.
Teachers' professional and ethical responsibilities. Connections of schools to other social agencies. Relations of teachers to colleagues, families, other social service providers, and community leaders. Roles in school governance.
- 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 circumstance. 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.

- 825 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.
- 826 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.
- 830 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.
- 831 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.
- 835 Theory and Research on the Teaching of Writing**
Spring. 3(3-0) SA: TE 883D
Social, cognitive, and developmental perspectives on teaching writing. Implications for curriculum and instruction in middle and secondary schools.
- 836 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.
- 840 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.
- 841 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.
- 842 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.
- 843 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.
- 844 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.
- 845 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.
- 846 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.
- 847 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.
- 848 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.
- 849 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.
- 850 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.
- 851 Literacy for the Young Child in Home and School**
Spring 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.
- 853 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.
- 854 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.
- 855 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.
- 856 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.
- 857 Teaching and Learning Mathematical Problem Solving**
Spring. 3(3-0) RB: Two undergraduate mathematics courses.
Alternative approaches to solving mathematical problems and incorporating problem solving into K-12 teaching. Selection, appraisal, and uses of problems in the classroom. Materials and assessment strategies.
- 860 Practice and Inquiry in Science Education**
Spring. 3(3-0)
Teaching science subjects. Emphasis on learner diversity, learning community, conceptual understanding, subject matter content, and learners' prior knowledge.
- 861A 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.
- 861B 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.
- 861C Action Research in K-12 Science and Mathematics Classrooms**
Summer. 3(3-0) P: (TE 861A or concurrently) 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.

Teacher Education—TE

- 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. 3(3-0) RB: Nine credits in reading or language arts and classroom teaching experience.
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. 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 and Science 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.
- 890 Independent Study**
Fall, Spring, Summer. 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.
- 891 Special Topics in Teaching, Curriculum, and Schooling**
Fall, Spring, 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.
- 891A Special Topics in Science Education**
Summer. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to masters students or doctoral students.
Issues related to teaching K-12 school subjects to diverse learners.
- 892 ESL Classroom Practice: K-12 Literacy Instruction**
Fall. 3(3-0) C: LLT 807 concurrently.
Classroom management for the teaching of English as a second language in K-12 settings. Lesson planning and materials development. Adapting authentic materials. Microteaching.
- 894 Laboratory and Field Experiences in Teaching, Curriculum, and Schooling**
Fall, Spring, Summer. 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
Identifying and resolving ethical problems in research. Collegial interactions. Authorship, publication, and reviewing practices. Data management. Ownership of data and intellectual property. Conflicts of interest. Protection of human and animal subjects. Lab safety and compliance.
- 896 ESL Practicum: K-12**
Spring. 2(2-0) P: TE 892
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 oral and written discourse and sociocultural contexts.

- 917 Contemporary Theories and Discourses in Education**
Fall of even years. 3(3-0)
Logical positivism, interpretive theories, critical theory, feminist theory, poststructuralism and neo-pragmatism. Applications to curriculum, teaching, and educational policy.
- 918 Disciplinary Knowledge and School Subjects**
Spring. 3(3-0)
Cross-disciplinary comparisons of the nature of knowledge, its creation, refutation, and use. Correspondence between disciplinary knowledge and knowledge as represented in schools.
- 919 Policy Analysis in Education**
Fall. 3(3-0)
Conception, generation, and analysis of educational policies. Contexts such as governance levels, national setting, and legislative forms. Uses, limitations, and ethics of policy analysis.
- 920 Social Analysis of Educational Policy**
Spring. 3(3-0)
Social science perspectives on factors outside and inside school systems which shape policy and influence both the nature of policy problems and the form of educational solutions.
- 921 Learning to Teach**
Fall. 3(3-0)
Intellectual, practical, and moral dimensions of teaching and learning to teach. Impact of formal and informal influences on teachers' knowledge, skills, and attitudes.
- 923 Comparative Perspectives on Curriculum, Instruction, and Teacher Education**
Spring of odd years. 3(3-0)
Contrasting national responses to universal questions. Links among education and other nation-building institutions. Organization and distribution of knowledge. Organization of, preparation for, and practice of teaching.
- 924 Philosophy of Education: Ideas and Methods**
Spring of even years. 3(3-0)
Selected ideas in education from different philosophical traditions. Issues of method, historical perspectives, and textual analysis.
- 926 Proseminar in Mathematics Education I**
Fall. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Science and Mathematics Education. Administered by Science and Mathematics Education.
Research on the learning and teaching of mathematics. Teaching, teacher and student learning, curriculum, and educational policy. Historical, philosophical, empirical, and theoretical perspectives.
- 927 Proseminar in Mathematics Education II**
Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Science and Mathematics Education. Administered by Science and Mathematics Education. P: SME 926
Continuation of SME 926.
- 928 Proseminar in Educational Policy**
Fall. 3(3-0) Interdepartmental with Educational Administration. Administered by Educational Administration.
Disciplinary perspectives on policy issues. Influence of research on policy process. Politics and educational practice as determinants of policy choice.
- 931 Introduction to Qualitative Methods in Educational Research**
Fall, Spring, Summer. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Educational Administration. Administered by Teacher Education. RB: CEP 930
Concepts and assumptions underlying multiple traditions of qualitative research methods in education. Relationship between research questions and qualitative research design. Epistemology, methods, and ethical issues of ethnography, case study research, grounded theory, oral history and discourse analysis. Criteria for appraising and critiquing qualitative research designs, claims, and evidence.
- 934 Introduction to Quantitative Methods in Educational Research**
Fall, Spring. 3(3-0) RB: CEP 930
Concepts and assumptions underlying quantitative research methods in education. Relationship between research questions and quantitative research design. Issues of inference, reliability, and validity. Application of statistical analysis to contemporary issues in education. Criteria for appraising and critiquing quantitative research designs, claims, and evidence. Quantitative research ethics.
- 939 Special Topics in Advanced Qualitative Methodology**
Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P: TE 931
Special topics in advanced methods of qualitative research in education.
- 940 Curriculum Deliberation and Development**
Fall of odd years. 3(3-0)
Research in curriculum deliberation and development. Discourse, group dynamics, processes, and outcomes for teaching and learning.
- 942 Economic Analysis in Educational Policy Making**
Spring of even years. 3(3-0) Interdepartmental with Educational Administration. Administered by Educational Administration.
Economic effects of education. Economic analysis of policy issues in education. Alternative theoretical perspectives. Applications to the United States and other countries.
- 943 Seminar in Professional Development**
Spring of even years. 3(3-0)
Synthesis and application of knowledge acquired through consideration of research and field-based inquiry from teacher practice and change initiatives.
- 946 Current Issues in Literacy Research and Instruction**
Spring. 3(3-0)
Current research trends in the psychological, social, and political dimensions of literacy and literacy instruction.
- 950 Mathematical Ways of Knowing**
- Fall of even years. 3(3-0) RB: Two undergraduate mathematics courses.
Philosophical, cultural, political, societal, psychological, and historical perspectives on knowing in mathematics as a discipline.
- 954 Design and Methods in Mathematics Education Research**
Fall. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Science and Mathematics Education. Administered by Science and Mathematics Education. RB: SME 926 and SME 927
History, current trends, and issues pertaining to research design and methods in mathematics education research. Mathematics education research in the areas of policy, teaching, teacher learning, and student learning with particular attention to how features of research designs influence research findings.
- 955 Contemporary Issues in Science Curriculum and Teaching**
Fall. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
Epistemological, social, psychological, and historical foundations of science education in relation to contemporary issues and problems of science curriculum, teaching, and policy.
- 958 Using Literacy to Learn: Curriculum and Pedagogy**
Fall. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Teacher Education. R: Open only to Ph.D. students in the College of Education.
Centrality of oral and written language in all school learning. Curriculum as text and instruction as discourse. Historical development of literacy curriculum and pedagogy as conceptualized and enacted in school settings. Language of teaching and learning in the classroom.
- 959 Acquisition and Development of Language and Literacy**
Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Teacher Education. R: Open only to Ph.D. students in the College of Education.
Literacy development including oral language base from birth through adulthood. Oral and written language development and learning in and out of school. Sociocultural contexts in relationship to schooling. Cross-cultural and international literacy development. Schooling, global economy, world health, and post-colonialism.
- 970 Curriculum and Pedagogy in Teacher Education**
Spring of even years. 3(3-0)
Teacher learning opportunities at the preservice, induction, and inservice levels. Intended and enacted curriculum, sources of pedagogy, and their impact on teachers' knowledge, skills, and attitudes.
- 971 Teacher Learning in School Settings**
Fall of odd years. 3(3-0)
Research about school-based learning by prospective, beginning, and experienced teachers. Observation, conversation, writing, and classroom research as tools for improving teaching.

Teacher Education—TE

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.