TEACHER EDUCATION ΤE

Department of Teacher Education College of Education

Introduction to Early Childhood and Elementary Education 100

Fieldentary Education Fall, Spring, Summer. 1(1-0) Teaching practices and child development across grades PK-6. Understanding educational experiences, interests, abilities, and demands of the education profession.

Social Foundations of Justice and 101 Equity in Education Fall, Spring. 3(3-1) Not open to stu-

dents with credit in TE 250.

Understanding self, schools, and society; emphasizing racial justice, equity, and social identity markers.

Pedagogy and Politics of Justice and 102 Equity in Education

Spring. 3(3-1) P: TE 101 RB: Comple-tion of ethnic studies course, or concurrent

Understanding self, schools, and society; emphasizing racial justice, equity in education, pedagogy, and politics.

Seminar in Integrated Science for 120 Elementary Schools Spring. 1(1-1) Interdepartmental with Integrated Science Education. Administered by Integrated Science Education. P: (BS 161 or BS 162 or BS 181H or BS 182H or LB 144 or LB 145) or (CEM 141 or PHY 231 or PSL 250 or GLG 201 or GEO 203) R: Open to students in the College of Education or in the Education major or in the Special Education major or approval of college. SA: SME 120

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) Interde-partmental with Counseling, Educa-tional Psychology and Special Educa-tion. 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.

Current Issues in Education 201

Fall, Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychol-ogy 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

Literacy, Learners, and Learning in Context – Elementary (W) Fall, Spring, Summer. 3(2-4) P: TE 150 and Completion of Tier I Writing Re-quirement and (TE 250 or CEP 240 or HDFS 212) R: Not open to freshmen or combeneration of the state of the students in sophomores and open to students in the elementary teacher certification program (admitted).

Language and literacy development in sociocultural context at the elementary level (K-8). Natural and socially constructed differences among learners. How to learn about a child. Ten components of literacy. Assessment. Reading or writing related disability.

302 Learners and Learning in Contexts -Secondary (W)

Fall, Spring, Summer. 4(3-4) P: TE 150 and (TE 250 and completion of Tier I writing requirement) R: Not open to freshmen or sophomores and open to

Treshmen of sophomores and open to students in the Secondary Teacher Certification Program (Admitted).. Role of social context and sociocultural back-ground in learning at the secondary level (7-12). Natural and socially constructed differences among learners. Relationship among subjectspecific knowledge, teaching and learning that subject, and the institutional and communal context. Multiple literacies.

304 Algebra for Elementary and Middle School Teachers

Fall. 3 credits. Interdepartmental with Mathematics. Administered by Mathematics. P: (MTH 201 and MTH 202 and MTH 301) and completion of Tier I writ-ing requirement R: Open to undergraduate students in the College of Education or in the Department of Teacher

Education. Approval of department. Algebra needed for understanding connections between topics of algebra and the mathematics taught in elementary and middle school.

305 Functions and Calculus for Elementary and Middle School Teachers (W) Spring. 3(3-0) Interdepartmental with

Mathematics. Administered by Mathe-matics. P: (MTH 304) and completion of Tier I writing requirement

Functions and calculus needed for understanding connections between topics of calculus and the mathematics taught in middle school.

320 Integrated Science for Elementary Schools

Spring. 3(2-2) Interdepartmental with Integrated Science Education. Administered by Integrated Science Education. P: ISE 120 and (BS 161 or BS 162 or BS 181H or BS 182H or LB 144 or LB 145 or PSL 250 or ZOL 355) and (PHY 231 or PHY 231C or CEM 141 or LB 171) and (GLG 201 or GEO 203 or AST 207) R: Open to students in the Integrated Science Elementary Teaching Major. SA: SME 320 Not open to students with credit in ISE 301.

Analysis of the concepts integrating science across life sciences, earth sciences, and physi-cal 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.

Immigrant Language and Culture-352

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.

403 **Teaching of Science to Diverse** Learners - Elementary

Fall. 3(3-2) P: ((ISE 301 or ISE 320 or ISE 420) and completion of Tier I writing requirement) and TE 301 R: Not open to freshmen or sophomores and open to students in the elementary teacher certification program (admitted)

Teaching science to diverse learners at the elementary level (K-8). Inquiry into and construc-tion of subject-specific meaning. Science subject matter adapted to learner diversity. Teachers' roles, including professional, intellectual, and sociopolitical responsibilities.

TE—Teacher Education

404 **Teaching of Social Studies to Diverse Learners - Elementary** Fall. 3(3-2) P: (TE 301) and completion of Tier I writing requirement R: Not open to freshmen or sophomores and open to students in the elementary teacher certification program (admitted).

Teaching social studies to diverse learners at the elementary level (K-8). Inquiry into and construction of subject-specific meaning. Social studies subject matter adapted to learner diver-sity. Teachers' roles, including professional, intellectual, and sociopolitical responsibilities.

Teaching of Language and Literacy to Diverse Learners - Elementary-Spring. 3(3-2) P: (TE 403 and TE 404 405 and TE 348) and completion of Tier I writing requirement R: Not open to freshmen or sophomores and open to students in the elementary teacher certification program (admitted).

Teaching language and literacy to diverse learners at the elementary level (K-8). Inquiry into and construction of subject-specific meaning. Literacy subject matter adapted to learner diversity. Teachers' roles, including professional, intellectual, and sociopolitical responsibilities.

406 **Teaching of Mathematics to Diverse** Learners – Elementary Spring. 3(3-2) P: (MTH 201 and MTH 202 and TE 403 and TE 404) and com-pletion of Tier I writing requirement R: Not open to freshmen or sophomores and open to students in the elementary teacher certification program (admit-

ted). Teaching mathematics to diverse learners at the elementary level (K-8). Inquiry into and construction of subject-specific meaning. Mathematics subject matter adapted to learner diversity. Teachers' roles, including professional, intellectual, and sociopolitical responsibilities.

Teaching Subject Matter to Diverse 407 Learners - Secondary (W) Fall. 5(3-8) P: (TE 301 or TE 302) and Completion of Tier I Writing Require-ment R: Not open to freshmen or sophment R: Not open to freshmen or soph-omores and open to students in the Secondary Teacher Certification Pro-gram (Admitted). Examining teaching as enabling diverse learners to inquire into and construct subject-specific meanings at the secondary level (7-12). Adapt-ing a ubiet metter to learner diversity. Evalariae

ing subject matter to learner diversity. Exploring multiple ways diverse learners make sense of the curriculum.

408 Crafting Teaching Practices -Secondary (W)

Spring. 5(4-6) P: (TE 407) and completion of Tier I writing requirement R: Not open to freshmen or sophomores and open to students in the Secondary Teacher Certification Program (Admitted).

Gathering data on learners to inform content and instructional decisions. Learning what should be taught and how it should be taught for specific disciplines at the secondary level (6-12). Teachers' multiple roles and their professional, intellectual, sociopolitical, and communal responsibilities

Crafting Teaching Practices in the 409 Secondary Teaching Minor Spring. 1(1-0) A student may earn a maximum of 5 credits in all enrollments

for this course. P: (TE 407 and (TE 408 or concurrently)) and completion of Tier I writing requirement R: Not open to freshmen or sophomores and open to students in the Secondary Teacher Certification Program (Admitted).. Deciding what should be taught for specific dis-

ciplines at the secondary level (7-12). Disciplinespecific strategies for gathering data on learners to inform content and instructional decisions. Discipline-specific instructional strategies and student management and safety strategies.

Integrated Science Research Fall, Spring. 3(2-2) Interdepartmental with Integrated Science Education. Ad-420 ministered by Integrated Science Education. R: Open to seniors in the General Science Secondary Teaching Major and open to seniors in the Integrated Science Elementary Teaching Major. SA: SME 420

Research design and data analysis of individual research projects relevant to the K-12 science curriculum, integrating topics in life, earth, and physical science.

430 Introduction to Arts in the Classroom Fall, Spring. 3(3-0) R: Open to under-

graduate students in the College of Education. Introduction to the power of teaching and learn-

ing through the arts. Explore how performing and visual arts can reach multiple learning styles and nurture the creative process of children through its innate variety of educational methods and expressions.

431 Learning Through Drama

Fall. 3(3-0) R: Open to undergraduate

students in the College of Education. Introduction to the power of teaching and learning through drama. Explores how creative dramatics, and other art forms, can reach multiple learning styles through its innate variety of educational strategies and expressions.

432 Learning Through Movement

Spring. 3(3-0) R: Open to undergradu-ate students in the College of Education

Introduction to the power of teaching and learn-ing through movement and dance. Explores how movement and dance can reach multiple learning styles through its innate variety of educational strategies and expressions.

Issues of Diversity in Children's and 448 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.

458 Reading, Writing, and Teaching Poetry

Fall. 3(3-0) R: Open to undergraduate students in the College of Education. Reading poetry, writing from prompts, peer workshops, pedagogical strategies.

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. Approval of department.

Supervised individual or small group study of the practice of teaching.

Special Topics in Teacher Education 491 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. Aspects of teaching practice and inquiry into

practice

Field Experience in Teacher 494 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.

Student Teaching in Music 495

Fall, Spring. 9 credits. Interdepart-mental 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.

496 **Becoming a School Music Teacher** Fall, Spring. 3(2-3) R: Open to seniors in the Music Education Major. Not open to students with credit in TE 801 or TE 803. C: MUS 495 concurrently. Teachers' professional and ethical responsibili-

ties. Relations of teachers to colleagues, families, social service providers and community leaders. Teacher's role in school governance and accountability.

Internship in Teaching Diverse 501 Learners I

Fall. 6(2-24) P: TE 405 or TE 406 or TE 408 or STA 482 R: Open to students in the Teacher Certification Internship Year Studies Program.

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 class-rooms 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.

503 Internship in Teaching Diverse Learners in Additional Endorsement Areas

Fall, Spring, Summer. 1(1-4) A student may earn a maximum of 5 credits in all enrollments for this course. P: TE 409 RB: All other courses in the additional endorsement program should be completed prior to enrollment in TE 503. R: Open to students in the Teacher Certifi-cation Internship Year Studies Program.

Directed and evaluated internship in heterogeneous classrooms in an additional teaching en-dorsement area. Teaching worthwhile content to students with varied learning needs. Theoretical and field-based explorations of common teaching dilemmas.

801 **Professional Roles and Teaching** Practice I

Fall. 3(2-3) P: TE 405 or TE 406 or TE 408 or STA 482 R: Open to students in 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 405 or TE 406 or TE 408 or STA 482 R: Open to students in the Teacher Certification Internship Year Studies Program. Not open to stu-dents 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.

Professional Roles and Teaching 803 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. Di-lemmas surrounding research on practice. Appraising and reporting results of inquiry.

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.

Inquiry into Classroom Teaching and 808 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.

809 Inquiry-Oriented Instructional Strategies for the Elementary Classroom

Spring. 3(3-0) RB: Students with prior or concurrent experience teaching in el-ementary classrooms will be best

Served by the course. Learning goals for Prekindergarten to Grade 5 children in mathematics, science, and social studies. Research related to engaged learning. Design and implementation of inquiry-based pedagogical practices, such as group-worthy tasks, place-based learning, and integrated unit planning

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.

Teacher Leadership in Practice 812

Leacher Leadership in Practice Fall. 3(3-0) P: TE 808 or concurrently RB: Students with prior or current expe-rience teaching in K-12 schools will be best served by this course. R: Open to graduate students or lifelong graduate students. Approval of department.

Teacher leadership through fieldwork in school contexts. Research on teacher leadership and leadership theory.

Comparative Analysis of Educational 815 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.

818 **Curriculum In Its Social Context**

Fall, Spring. 3(3-0) Philosophical, social, and historical foundations of curriculum. Issues and practices across sub-jects, 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

Issues of Culture in Classroom and 822 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 learn-ing teams. Impact of learning communities on equity and on school curricula.

Diverse Learners and Learning Subject Matter 825

Summer. 3(3-0) Multiple perspectives on teaching subject matter to diverse learners. Texts, curricula, and peda-gogical approaches. Subject-specific issues related to classroom diversity.

Teaching School Subject Matter with 831 Technology Fall, Spring. 3(3-0)

Uses of technologies in teaching subject matter to diverse learners. Critical perspectives on technologies in schools.

836 Awards and Classics of Children's Literature

Spring of even years, Summer of odd 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.

838 Children's Literature in Film

Summer. 3(3-0) Applies media and film studies perspectives to films created from children's literature.

Elementary Reading Assessment 842 and Instruction

Fall, Summer. 3(3-0) Characteristics of effective reading assessment and instruction as identified in research and described by respected reading researchers and practitioners.

843 Secondary Reading Assessment and Instruction Spring. 3(3-0)

Knowledge and methodology for teaching lan-guage, literacy, and thinking in selected secondary school subjects.

Language Diversity and Literacy Instruction and Assessment Fall. 3(3-0) RB: One introductory lin-845

guistics course. Acquisition of literacy in schools by and assessment of 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.

848 Writing Assessment and Instruction Spring of even years. 3(3-0) RB: TE 847

Writing theory, research, and pedagogy. Writing processes, strategies, assessments, and environments that address diverse writers (K-adult). Expository, narrative, and poetic genres. Prewriting, composing, revising, editing, and publishina

849 Methods and Materials for Teaching Children's and Adolescent Literature Fall of odd years, Spring 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 850 Adolescents

Fall of even years. 3(3-0) Teaching and learning of critical and aesthetic responses to literature for K-12 students.

853

Assessing and Responding to Literacy Learning Difficulties I Fall. 3(3-0) P: (TE 842 or TE 843) and (TE 807 and TE 845 and TE 848)

Instructional needs of struggling literacy learners. Multiple processes that contribute to proficient reading and writing. Difficulties related to specific reading and writing processes and/or to the orchestration of those processes. Developing and assessing vocabulary, comprehension, and composition skills.

Assessing and Responding to 854 Literacy Learning Difficulties II

Spring of even years. 3(3-0) P: TE 853 RB: TE 843

Identification of and response to instructional needs of struggling literacy learners. Collabora-tion in instructional planning and coordination across instructional settings, causes and correlates of reading difficulties.

Teaching School Mathematics Fall. 3(3-0) RB: Two undergraduate 855 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.

Language Identity and Ideology in 856 Multilingual Settings

Spring. 3 credits. Interdepartmental with Language, Learning and Teaching. Administered by Language, Learning Administered by Language, Learning and Teaching. R: Open to graduate stu-dents in the College of Education or in the Department of Linguistics and Ger-manic, Slavic, Asian and African Languages or in the Second Language Studies Major or in the Teaching English to Speakers of Other Languages Major or in the Sociology Disciplinary Teaching Minor.

Current debates on the relationship between language, identity, and ideology. Theories of identity and ideology related to a variety of educational settings. Negotiation of identity and ideology with respect to social relationships between writer and reader, teacher and student, classroom and community.

Teaching and Learning Mathematical 857 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

Teaching Science for Understanding 861A

Summer. 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 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. 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

Summer. 3(3-0) Purposes for teaching and learning social stud-ies. Developing citizenship, social science rea-soning, and content knowledge with diverse learners.

Perspectives in Social Studies: 867 **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.

Curriculum Design, Development, 870 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

873

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.

> Literacy Leadership Spring. 3(3-0) RB: Nine credits in read-ing 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.

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 Mathematics Education. Administered by Mathematics Education. RB: Past or concurrent mathematics teaching experience. SA: SME 879

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 cred-its in all enrollments for this course. Supervised individual study in an area of curriculum, teaching, or schooling.

Special Topics in Teaching, Curriculum, and Schooling 891

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.

892 ESL/FL 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 and foreign languages 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 re-

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/FL Practicum: K-12

Spring. 2(2-0) P: TE 892 Syllabus and lesson plan development for a four-week field experience in English as a second language or foreign language K-12 setting.

897 Seminar in Feminist Theories,

Epistemologies, and Pedagogy Spring of odd years. 3(3-0) Interdepartmental with English and Philosophy and Sociology and Women's Studies. Administered by Women's Studies.

Foundational knowledge, theory, epistemology, and pedagogy in women's and gender studies from a multi-disciplinary, global perspective.

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 and open to doctoral students in the Mathematics Education major.

major. Purposes, history, structure, reform and consequences of the K-12 educational enterprise. Teaching practice, student learning, curricula, school organization, and educational policy. Theories and interpretations of educational systems. Schooling experiences of minority populations. Consideration of topics in and outside of the U.S.

902 Proseminar in Curriculum, Instruction, and Teacher Education II Spring. 3(3-0) RB: TE 901 R: Open to doctoral students in the Curriculum, In-

struction 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.

904 ELL/ESL Research and Practice: K-12

On Demand. 3(3-0) R: Open to doctoral students.

Sociocultural and socio-political contexts for research in ELL/ESL teaching and learning; methods in ELL/ESL research; biliteracy/bilingualism, multiliteracies/multilingualism, and syncretic literacies; methods and curricula in second language teaching; identity, motivation, gender, race, and class; parent, school, and community partnerships for second language learners.

907 Psychological Study of Teaching-Spring 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.

908 Sociohistorical Perspectives on English Language Learners and Second Language Education in the US

Spring of even years. 3(3-0) Social and historical contexts in which languages are used, taught, and learned and how they have a profound impact on linguistic practice and language acquisition processes at school and in society at large.

909 English Language Learners in Content Areas: Constructing Research Communities and Resources Spring of odd years 3(3-0) B: Of

Spring of odd years. 3(3-0) R: Open to doctoral students.

Multiple perspectives on communities and resources for teaching and learning content areas in contexts with English learners. Issues of equity and implications for non-English learners will also be discussed.

910 Youth Language and Literacy in Schools and Communities Fall of even years. 3(3-0) RB: Courses or work experiences in education, youth or adolescent development and programming, literacy, urban studies, ethnic studies, sociolinguistics

Contemporary research, theory, and practice critically situate school and beyond school language and literacy learning in the lives of youth and their communities. Focus on social justiceoriented work with youth of color and other young people marginalized by systemic inequalities. Increasing understanding of the oral and written communication many young people engage in through their participation in youth cultures. A study of race, class, gender identity, sexuality, ability, and citizenship status as they are lived through languages and literacies by youth and their communities.

912 Reading Comprehension: Research and Theory

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.

Open to doctoral students. Theory and research on the development, teaching, and learning of reading comprehension birth through adulthood.

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 in Sociocultural Context Fall of even 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.

The learning and development of literacy and the role of literacy in mediating cognition, affect, and action in educational contexts. Relationship between literacy 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.

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.

TE—Teacher Education

926 **Proseminar in Mathematics** Education I

Fall. 3(3-0) Interdepartmental with Counseling, Educational Psy & Special Education and Mathematics Education. Administered by Mathematics Education. SA: SME 926

Research on the learning and teaching of mathematics. Focus on curriculum, discourse, equity and teacher education.

927 **Proseminar in Mathematics** Education II

Spring. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathemat-ics Education. Administered by Mathe-matics Education. SA: SME 927

Research on the learning and teaching of mathematics. Focus on teaching, student learning, assessment and policy.

928 **Proseminar in Educational Policy**

Fall. 3(3-0) Interdepartmental with Educational Administration. Administered by Educational Administration. Disciplinary perspectives on policy issues. Influ-

ence of research on policy process. Politics and educational practice as determinents of policy choice.

931 Introduction to Qualitative Methods in Educational Research

Fall, Spring, Summer. 3(3-0) Interde-partmental with Counseling, Educa-tional Psychology and Special Educa-tion 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

Introduction to Quantitative Methods 934 in Educational Research Fall, Spring. 3(3-0) RB: CEP 930

Concepts and assumptions underlying quantita-tive 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

936 Topics in Research on Teaching and Learning Science

Fall. 3 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: PhD student in Teacher Education or science related fields

Research on teaching and learning in science. Teacher learning, student learning, and assess-ment of teaching and/or learning.

Topics in Social, Historical, 937 **Philosophical Foundations of** Science Education Spring of even years. 3 to 9 credits. A

student may earn a maximum of 9 credits in all enrollments for this course. Foundations for research in science education.

Diversity, social justice, and equity research and cognitive research, and the role of social, historical, and philosophical perspectives on framing research questions, methods and claims in these areas.

938 **Qualitative Data Analysis**

Fall. 3(3-0) Qualitative data analysis tools and techniques; approaches and theories that inform and guide the analysis, interpretation, and representation of qualitative data.

939A **Special Topics in Advanced Qualitative Methodology**

Fall of even years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.

Special topics in advanced methods of qualitative research in education.

939B Advanced Qualitative Methods: **Critical Ethnography**

Spring of odd years. 3(3-0) Critical theories—postmodernism, poststructuralism, postcolonialism, feminism, queer theoryand their implications for conceptualizing, conducting, analyzing, and representing one's re-search. Political and ethical dimensions inherent in qualitative research as well as the amalgama-tion of epistemology, ontology, and methods into a coherent and purposeful methodology that is ethical, reciprocal, and praxical.

Advanced Qualitative Methods: 939C **Discourse Analysis**

Spring of even years. 3(3-0) Discourse analytic approaches to research in education and related areas of inquiry through an interdisciplinary lens and traditions that range from interactional sociolinguistics and narrative analysis to conversation analysis and critical discourse analysis.

939D Advanced Qualitative Methods: Case Studies

Spring of even years. 3(3-0) Aims and methods of case study research; conceptions of case study research as well as inter-pretive methods frequently used in case studies, including ethnographic observations, textual analysis, multimodal/video analysis, interviews, and focus groups.

Advanced Qualitative Methods: 939E **Humanities Oriented Research** Fall of odd years. 3(3-0)

Research traditions in history, philosophy, literary criticism, arts, narrative inquiry, language, communication arts, ethics, religion, curriculum theory, and cultural studies. Epistemology, theory, arts, values, and history of science

939F Advanced Qualitative Methods: Phenomenology

Spring of odd years. 3(3-0) Phenomenological methodologies to study the caring professions (education and related fields). Exploring participants' subjective experiences and interpretations of the phenomenon being studied

939G Advanced Qualitative Methods: Humanizing Research—Decolonizing Qualitative Inquiry Fall of even years. 3(3-0)

Conducting qualitative research for justice with individuals and groups who are marginalized by systems of inequality; contemporary methodological dilemmas and innovations. Building relationships of dignity and care; reciprocity and dialogic consciousness-raising; and ways in which research might be considered an answer to pressing social and educational problems.

Curriculum Deliberation and 940

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 Economics of Education

Spring. 3(3-0) Interdepartmental with Educational Administration. Administered by Educational Administration. R: Open to graduate students.

Economic effects of education. Economic analysis of policy issues in education. 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.

944

Seminar in English Education On Demand. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to doctoral students.

Current issues in research, methods and policy in the field of English education.

945 Current Issues in Children's and Adolescent Literature On Demand. 1 to 3 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open to doctoral students.

Intensive study of current issues in writing, publishing, reading, teaching, and analyzing chil-dren's and adolescent literature.

Current Perspectives on Literacy 946 Research and Instruction Spring of even years. 3(3-0) R: Open to

doctoral students. Theoretical and empirical development in literacy research and instruction.

Comparative International Education 947 Policy

Fall. 3(3-0) Interdepartmental with Educational Administration. Administered by Educational Administration. R: Open to graduate students.

International and comparative education policy. National and international policy actors. Crossnational education policy research. Insights from international research for U.S. education policy.

950 Mathematical Ways of Knowing-

Spring of odd 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 Education. Administered by Mathematics Education. RB: (MTHE 927) and at least one approved research methods course. SA: SME 954

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 research design influence research findings.

958 History of Literacy Research and Instruction

On Demand. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Teacher Education. R: Open to doctoral students.

Key historical, political, scholarly, and educational issues influencing literacy curriculum and pedagogy.

959 Acquisition and Development of Language and Literacy

On Demand. 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. Administered by Teacher Education. R: Open to doctoral students.

Language and literacy development with an alternating focus on early and middle childhood and adolescence and adulthood. Major areas of language and literacy development including phonology, orthography, morphology, semantics, syntax, and pragmatics. Connections between oral and written language development. Home and school influences on language and literacy development. Individual differences in language and literacy development.

961 Urban Politics, Education, and School Reform

Spring of even years. 3(3-0) R: Open to doctoral students.

Challenges cities face in initiating and sustaining meaningful education reform efforts.

962 Teachers and Teaching in Urban Contexts

Fall of even years. 3(3-0) R: Open to doctoral students.

Effective instruction and instructional support in urban settings.

963 Critical Race Theory in Education

Spring of even years. 3(3-0) R: Open to doctoral students. Critical race theory as an analytical framework that provides race opictumology, methodological, and

provides race epistemology, methodological, and pedogogical approaches to study everyday inequalities in P-20 education.

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.

980 Writing, Research, and Theory

Fall of even 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. Theory and research on the development, teaching, and learning of writing, birth through adulthood.

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 stu-

dent may earn a maximum of 9 credits in all enrollments for this course.

Special topics in the fields of curriculum, instruction, and teacher 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 Research Fall, Spring, Summer. 1 to 23 credits. A student may earn a maximum of 30 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.