EDCI - CURRICULUM AND INSTRUCTION

EDCI400 Field Experience in Art Education (1 Credit)
Practical classroom experience in teaching/evaluating/exhibiting the products of art lessons.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department; and must be in Secondary Educ: Art program.

EDCI401 Student Teaching in Elementary School: Art (4-8 Credits)

EDCI404 Student Teaching Seminar: Art Education (3 Credits)
An analysis of teaching theories, strategies, and techniques in the student teaching experience.
Prerequisite: EDCI405 and TLPL430.
Corequisite: TLPL432 and TLPL431.
Restriction: Minimum cumulative GPA of 2.75; and must be in Secondary Educ: Art program.

EDCI405 Art Education Methods I (3 Credits)
Methods I provides future art teachers with a knowledge base of the theories and best practices of effective pedagogy for teaching methods and strategies, diversity, motivational techniques, classroom management, assessment and evaluation methods, and accommodating all students including those with special needs.
Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. And must be in Secondary Educ: Art program; or must be in Secondary Educ: Art pre-major program.
Credit Only Granted for: EDCI300 or EDCI405.
Formerly: EDCI300.

EDCI406 Technology and Two-Dimensional Art (3 Credits)
A discussion/studio format used to develop skills, materials, resources and education strategies for using technology and two-dimensional art in K-12 programs.
Prerequisite: ARTT210.
Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department; and junior standing or higher; and must not be in any of the following programs (Early Childhood Education; Elementary Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Physical Education; Music Education; Special Education).

EDCI407 Practicum in Art Education: Three-Dimensional (3 Credits)
A lecture-studio course to develop skills, material resources, and educational strategies for three-dimensional projects in school settings.
Restriction: Must be in Secondary Educ: Art program; or must be a Pre-Art Education Major.

EDCI410 Methods I: K-12 World Language Methods and Technology (3 Credits)
The first of two sequential courses required for achieving competence in teaching a foreign language. The sequel to this course is EDCI433 (Methods II) entitled: Advanced K-12 Foreign Language Methods and Technology. EDCI410 requires on-going examination of theories relevant to language acquisition. Students will also investigate the instructional methods that reflect those theories. Lab and field experiences required.
Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department.
Credit Only Granted for: EDCI330 or EDCI410.
Formerly: EDCI330.

EDCI411 Knowledge, Reasoning, and Learning in Science (3 Credits)
For prospective science teachers. Investigations of the nature of knowledge, reasoning, and learning in middle and secondary science. Readings from cognitive science and science education research; studies of student thinking in interview and classroom observations; analyses of curricula. Includes laboratory and field experiences.
Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department.
Credit Only Granted for: EDCI370 or EDCI411.
Formerly: EDCI370.

EDCI413 Interdisciplinary Teaching in the Middle Grades I (2 Credits)
For prospective middle school teachers. Studying and planning interdisciplinary instructional practices in middle school. Utilizes context and experiences from students' field placements. Use of technology and incorporation of technology into instruction.
Prerequisite: TLPL413 and TLPL420; or permission of instructor.
Corequisite: EDCI360 and EDCI424.
Restriction: Minimum cumulative GPA of 2.75; and must be in the Middle School Teacher Education Program, major code 0804P.

EDCI414 Interdisciplinary Teaching in the Middle Grades II (2 Credits)
For prospective middle school teachers. Planning and implementing interdisciplinary instructional practices in middle school. Draws on the context of and experiences in the student teaching placement. Use of technology and incorporation of technology into instruction.
Prerequisite: EDCI360 and TLPL423.
Corequisite: EDCI425 and EDCI460.
Restriction: Minimum cumulative GPA of 2.5; and must be in the Middle School Teacher Education Program.

EDCI416 Teaching and Learning in Secondary Education: English (3 Credits)
An introduction for prospective middle and secondary English teachers into the basic issues, concepts, orientations, and processes that shape the teaching of English for diverse students in schools. Candidates explore their own perspectives in relation to local and national trends and develop basic teaching understanding and skills through on-campus seminars, teaching laboratory experiences, and guided field experiences. Students should reserve one full day or two half days per week for field experience.
Credit Only Granted for: EDCI340 or EDCI416.
Formerly: EDCI340.

EDCI417 Bases for English Language Instruction (3 Credits)
Examines current theory, research, best practice, curricula and materials focused on the teaching of English language to native and non-native English learners. Topics include morphology, syntax, semantics, vocabulary, pragmatics, argument, discourse structure, dialects, edited academic English, English language proficiency (listening, speaking, reading, writing) assessment, and instructional planning. English Language Learner (TESOL and SIOP) and special needs (inclusion) pupil issues considered.
Restriction: Must be in Secondary Educ: English Language Arts program; and minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI420 Student Teaching Seminar in Secondary Education: Social Studies (1 Credit)
An analysis of teaching theories, strategies, and techniques in the student teaching experience.
Prerequisite: EDCI426 and EDCI427.
Corequisite: EDCI421 and EDCI422.
Restriction: Minimum cumulative GPA of 2.75.
EDCI421 Student Teaching in Secondary Schools: Social Studies/History (12 Credits)
EDCI422 Student Teaching in Secondary Schools: Social Studies/Geography (12 Credits)
EDCI423 Art Education Methods II (3 Credits)
Methods II builds upon the pedagogical foundation of Methods I and provides future art teachers with the means for developing pre K-12 art lessons and unit plans for a balanced qualitative art program for today's diverse and inclusive schools and classrooms.
Prerequisite: TLPL435; or students who have taken courses with comparable content may contact the department.
Corequisite: EDCI430.
Restriction: Minimum cumulative GPA of 2.75; and must be in Secondary Educ: Art program.
EDCI424 Equitable Classrooms (2 Credits)
An exploration and application of major theoretical frameworks surrounding equity and critical pedagogy. Creating habits of mind that help teachers see all students as capable of achieving at high levels. Draws on the concurrent field experience.
Prerequisite: TLPL252, TLPL413, and TLPL420.
Corequisite: EDCI350 and EDCI423.
Restriction: Minimum cumulative GPA of 2.75; and must be in Middle School Education program.
EDCI425 Equity and Pedagogy (2 Credits)
An exploration and application of major theoretical frameworks surrounding equity and critical pedagogy. Pedagogical decision making that leads to greater equity and improved student learning for all students. Draws on the concurrent student teaching experience.
Prerequisite: TLPL475.
Corequisite: TLPL424 and EDCI460.
Restriction: Minimum cumulative GPA of 2.75; and must be in one of the following programs (Middle School Education; Early Childhood Education; Elementary Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Physical Education; Music Education; Secondary Educ: Art; Special Education).
EDCI426 Knowledge, Reasoning, and Learning in Secondary Social Studies (3 Credits)
An exploration of the nature of knowledge and reasoning in social studies disciplines as well as how students learn social studies. Assessment and investigation of students’ conceptions and misconceptions as well as their disciplinary thinking. Implications for teaching and initial lesson design are explored through on-campus seminars as well as guided field experiences. Students should reserve a regular half-day per week for the field experience in local schools. This course is required for admission to the secondary social studies double major.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department; and minimum cumulative GPA of 2.75.
EDCI427 Curriculum, Teaching, and Assessment in Secondary Social Studies (3 Credits)
An exploration of curriculum development, teaching, and assessment in secondary history/social studies. Focus on identifying students’ conceptions of social studies topics and designing lessons that advance students’ disciplinary thinking and understanding.
Prerequisite: TLPL470.
Corequisite: EDCI428.
Restriction: Must be in Secondary Educ: Social Studies program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Center for Learning & Educational Technology.
EDCI428 Field Experience in Secondary Social Studies Teaching (1 Credit)
Practical experience as an aide to a regular social studies teacher; assigned responsibilities and participation in a variety of teaching/learning activities. Students must reserve one full day per week for internship placement.
Corequisite: EDCI427.
Restriction: Must be in Secondary Educ: Social Studies program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching, Learning, Policy and Leadership department.
EDCI430 Student Teaching Seminar in Secondary Education: World Language (1 Credit)
An analysis of teaching theory, strategies and techniques in the internship experience.
Prerequisite: EDCI410 and EDCI433.
Corequisite: EDCI431 and EDCI474.
Restriction: Must be in Secondary Educ: Foreign Languages program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching, Learning, Policy and Leadership department.
EDCI431 Teaching Internship in Secondary Schools: World Language (12 Credits)
Practical experience as a full-time intern with a fully licensed World Language teacher in a diverse school setting; assigned professional responsibilities and participates in teaching/learning experiences.
Prerequisite: EDCI410 and EDCI433.
Corequisite: EDCI430 and EDCI474.
Restriction: Minimum cumulative GPA of 2.75; and must be in Secondary Educ: Foreign Languages program. Or permission of EDUC-Teaching, Learning, Policy and Leadership department.
Additional Information: Internship lab fee applies. See current program description for details.
EDCI432 Issues in the Education of English Language Learners (3 Credits)
Introduction to and analysis of current and historical research, practice, trends, and public policy issues in education as they relate to English language learners in K-12 and other settings.
Credit Only Granted for: EDCI432 or EDCI488Q.
Formerly: EDCI488Q.
EDCI433 Advanced K-12 World Language Methods and Technology (3 Credits)
Teaches advanced best practices for effective foreign language instruction. Topics include: using authentic assessment and materials, applying national standards, teaching writing and culture, motivating students, providing strategy instruction, infusing technology, preparing for K-12 employment, and creating a professional portfolio.
Prerequisite: TLPL445.
Corequisite: EDCI438.
Restriction: Must be in Secondary Educ: Foreign Languages program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department.
EDCI434 Pedagogy of Teaching English Language Learners (3 Credits)
A survey of the historical and current approaches, methods, and techniques of teaching English to speakers of other languages, from grammar translation and audiolingual to communicative and task-based approaches will be presented. Additionally, successful classroom practices that address the needs of culturally diverse and language minority students will be analyzed. Students will have the opportunity to discuss, probe and apply theories and principles to hands-on teaching practices in real-life settings. Digital technologies that assist teaching English language learners (ELLs) will be emphasized as well.
EDCI436 Understanding Cross-Cultural Communication for Teaching English Language Learners (3 Credits)
Theories of intercultural communication and techniques for applying them in the teaching of English as a second language (ESL) and content classes. Research and evaluation of selected aspects of a culture as basis for creating, selecting and using culturally-responsive teaching materials and methods.
Credit Only Granted for: EDCI436 or EDCI488T.
Formerly: EDCI488T.

EDCI437 English Grammar Pedagogy for Teachers of English Language Learners (3 Credits)
Methods of teaching English grammar to English language learners. The role of teaching grammar. Effective methods and techniques for incorporating grammar in other communication activities.
Credit Only Granted for: EDCI437 or EDCI488P.
Formerly: EDCI488P.

EDCI438 Field Experience in Second Language Education (1 Credit)
Practical experience as an aide to a regular foreign language teacher; assigned responsibilities and participation in a variety of teaching/learning activities.
Corequisite: EDCI330.
Restriction: Permission of EDCU-Teaching, Learning, Policy and Leadership department; and must be in Secondary Educ: Foreign Languages program.
Repeatable to: 3 credits if content differs.

EDCI440 Internship Seminar in Secondary Education: English (1 Credit)
A review and analysis of current instructional theories, strategies and best practice in relation to the teaching internship. Meets at area high school, location provided before first meeting.
Prerequisite: EDCI447 and EDCI467.
Corequisite: EDCI441 and EDCI474.
Restriction: Must be in Secondary Educ: English Language Arts program; and minimum cumulative GPA of 2.75. Or permission of EDCU-Teaching, Learning, Policy and Leadership department.

EDCI441 Internship in Secondary Schools: English (12 Credits)
Practical experience as a full-time intern with a fully licensed English teacher in a diverse school setting; assigned professional responsibilities and participates in teaching/learning experiences. Internship lab fee applies. See current program description for details.
Prerequisite: EDCI447 and EDCI467.
Corequisite: EDCI440 and EDCI474.
Restriction: Must be in Secondary Educ: English Language Arts program; and minimum cumulative GPA of 2.75. Or permission of EDCU-Teaching, Learning, Policy and Leadership department.

EDCI443 Literature for Children and Youth (3 Credits)
Analysis of literary materials for children and youth. Timeless and ageless books, and outstanding examples of contemporary publishing. Evaluation of the contributions of individual authors, illustrators and children's book awards.
Restriction: Must be in Elementary Education program; or must be a Pre-Education Major.

EDCI447 Field Experience in English Teaching (1 Credit)
Practical experience as a part-time intern working with a fully licensed English teacher in a diverse school setting. Students must reserve one full day or two half days per week for the part-time internship.
Corequisite: EDCI467.
Restriction: Must be in Secondary Educ: English Language Arts program; and minimum cumulative GPA of 2.75. Or permission of EDCU-Teaching, Learning, Policy and Leadership department.

EDCI448 Student Teaching in Secondary Schools: Theatre/English (12 Credits)
Practical experience as an aide to a regular English, speech or drama teacher; assigned responsibilities and participation in a variety of teaching/learning activities.
Prerequisite: EDCI417.
Corequisite: EDCI440.
Restriction: Must be in Secondary Educ: English Language Arts program.

EDCI450 Internship Seminar in Secondary Education: Mathematics (1 Credit)
Strategies and techniques in the internship experience. Structured work on teaching portfolio (requirement for graduation and certification). Place, day, and time to be arranged.
Prerequisite: EDCI457 and EDCI455.
Corequisite: EDCI451 and EDCI474.
Restriction: Must be in Secondary Educ: Mathematics program; and minimum cumulative GPA of 2.75. Or permission of EDCU-Teaching, Learning, Policy and Leadership department.

EDCI451 Student Teaching in Secondary Schools: Mathematics (12 Credits)
EDCI455 Teaching and Learning High School Mathematics (3 Credits)
Methods of teaching and assessing the high school mathematics curriculum; aligning tasks and activities to curriculum standards; lesson planning; and selection and use of technology. The course also focuses on managing large group dynamics in the high school mathematics classroom.
Prerequisite: Must have 2 semesters of calculus; or permission of EDCU-Teaching and Learning, Policy and Leadership department.
Corequisite: EDCI355.
Restriction: Must be in Secondary Educ: Mathematics program; and minimum cumulative GPA of 2.75. Or permission of EDCU-Teaching and Learning, Policy and Leadership department.

EDCI457 Teaching and Learning Middle School Mathematics (3 Credits)
Methods of teaching and assessing the middle school mathematics curriculum. Understanding the conceptual difficulties students have in moving from whole numbers to rational numbers, additive thinking to multiplicative thinking, and arithmetic to algebra. Lesson planning and selection of technology and other materials are applied in the context of supervised tutoring of students having difficulty in middle school mathematics. Lab and field experience required. Supervised tutoring takes place on site at a local middle school therefore EDCI 457 students will be expected to travel to a local middle school for 8-10 of the class meetings.
Restriction: Minimum cumulative GPA of 2.75; and permission of EDCU-Teaching and Learning, Policy and Leadership department.

EDCI460 Student Teaching: Middle School (12 Credits)
A Middle-school student teaching experience in two content areas.
Prerequisite: EDCI413.
Corequisite: EDCI414 and EDCI425.
Restriction: Minimum cumulative GPA of 2.5; and permission of EDCU-Teaching, Learning, Policy and Leadership department; and for Middle School Education majors only.
EDCI461 Materials and Instruction for Creating Skilled and Motivated Readers, Part I (3 Credits)
Selecting, evaluating, and using a variety of materials and instructional strategies to create skilled and motivated readers in the elementary grades; Topics include emergent literacy, vocabulary development, reading comprehension and oral reading fluency in diverse classroom settings.
Restriction: Must be in Elementary Education program; and junior standing or higher. Or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI462 Materials and Instruction for Creating Skilled and Motivated Readers, Part II (3 Credits)
Selecting, evaluating, and using a variety of materials to create skilled and motivated readers in the elementary grades, particularly in diverse classroom settings; Topics include word analysis, spelling, writing, reading comprehension strategies, directed reading lessons, and explicit instruction.
Prerequisite: TLPL361 and TLPL460.
Corequisite: TLPL312, EDCI342, TLPL321, and EDCI322.

EDCI463 Reading in the Secondary School (3 Credits)
Provides secondary school teachers with understanding the need for and approaches to teaching students to read and learn from content area texts.
Restriction: Minimum cumulative GPA of 2.75; and must be in one of the following programs (Middle School Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Secondary Educ: Art); and permission of department required for post-baccalaureate students.

EDCI464 Assessment for Reading (3 Credits)
Examination of reading assessment theory, materials and procedures; Topics include validity and reliability in reading assessment, formal and informal assessment, reading instruction that is informed by ongoing assessment, and the effects of assessment on students and schooling in a diverse society.
Prerequisite: EDCI362.
Restriction: Senior standing. And must be in Elementary Education program; or must be in Early Childhood Education program.

EDCI466 Literature for Adolescents (3 Credits)
Reading and analysis of fiction and nonfiction; methods for critically assessing quality and appeal; current theory and methods of instruction; research on response to literature; curriculum design and selection of books.
Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI467 Teaching Writing (3 Credits)
Examines current theory, research, best practice, curricula and materials for teaching written communication in grades K-12. Focuses on analytical, argumentative, informative/explanatory, literary analysis, narrative, descriptive, and research writing. Emphasizes instructional planning, assessment, writer problem-solving strategies, information search, development, organization and style appropriate to task, purpose and audience for both non-digital and digital text. English Language Learner and special needs pupil issues considered.
Corequisite: EDCI447.
Restriction: Must be in Secondary Educ: English Language Arts program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI470 Learning and Teaching in Science (3 Credits)
Studies of student learning and instructional practices in science teaching.
Prerequisite: TLPL420; or permission of instructor.
Restriction: Must be in Secondary Educ: Science program.

EDCI471 Internship in Secondary Schools: Science (12 Credits)
Practical experience as a full-time intern with a fully licensed science teacher in a diverse school setting; assigned professional responsibilities and participates in teaching/learning experiences. Internship lab fee applies. See current program description for details.
Prerequisite: EDCI470.
Corequisite: EDCI480 and EDCI474.

EDCI474 Teaching Academically, Culturally, and Linguistically Diverse Students in Secondary Education (2 Credits)
Multi-disciplinary capstone course for Secondary Education majors. Discussion of pedagogical and content issues relevant for teaching academically, culturally, and linguistically diverse students with particular emphasis on students with special educational needs and English language learners. Students develop and use curriculum-based assessments and/or lessons with these groups of students.
Corequisite: Enrolled in internship/certification area.
Restriction: Must be in one of the following programs (Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Secondary Educ: Art); and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching, Learning, Policy and Leadership department.

EDCI475 Embracing Diversity in the Classroom Community (3 Credits)
An exploration of the richness and complexity of student diversity that teacher candidates will encounter in K-12 classrooms. Students will engage in critical reflection around diversity and equity issues.
Restriction: Admission to teacher education program; or permission of EDUC-Teaching and Learning, Policy and Leadership department.
Credit Only Granted for: EDCI475 or EDCI488L.
Formerly: EDCI488L.
EDCI480 Practices in Secondary School Science Teaching (2 Credits)
Analyses of student thinking, instructional interpretations, strategies, and techniques in the teaching internship.
Prerequisite: EDCI470.
Corequisite: EDCI471 and EDCI474.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department; and must be in Secondary Educ: Science program. Or minimum cumulative GPA of 2.75.
Credit Only Granted for: EDCI480 or EDCI488J.
Formerly: EDCI488J.

EDCI481 Student Teaching: Elementary (12 Credits)
EDCI485 Student Teaching in Elementary School: Physical Education (4-8 Credits)
Fulfills elementary teaching requirements in K-12 physical education programs.
Restriction: Must be in Physical Education program.

EDCI488 Selected Topics in Teacher Education (1-3 Credits)

EDCI489 Field Experiences in Education (1-4 Credits)

EDCI495 Student Teaching in Secondary Schools: Physical Education (2-8 Credits)

EDCI497 The Study of Teaching (3 Credits)
Identification and examination of learner and teacher outcome variables related to teaching systems, methods, and processes. Methods of conducting classroom research.
Prerequisite: EDCI481.
Corequisite: EDCI489.

EDCI498 Special Problems in Teacher Education (1-6 Credits)
Individual study of approved problems.
Restriction: Must be in a major within EDUC-Teaching, Learning, Policy and Leadership department; or must be in Curriculum and Instruction (Doctoral) program; or must be in Curriculum and Instruction (Master's) program; or permission of EDUC-Teaching, Learning, Policy and Leadership department.
Repeatable to: 6 credits.

EDCI499 Workshops, Clinics, and Institutes (1-6 Credits)
The following types of educational enterprise may be scheduled under this course heading: workshops conducted by the College of Education (or developed cooperatively with other colleges and universities) and not otherwise covered in the present course listing; clinical experiences in pupil testing centers, reading clinics, speech therapy laboratories, and special education centers; institutes developed around specific topics or problems and intended for designated groups such as school superintendents, principals and supervisors.
Repeatable to: 6 credits.

EDCI600 Trends in Art Education Curriculum (3 Credits)
Recent developments in art education.

EDCI601 Shifting Paradigms in Arts Education: Historical Investigations (3 Credits)
An investigation into major historical events and underlying beliefs, values and practices that influence contemporary arts education (visual art, drama, dance, music) at all levels of instruction. Selected literature that focuses on cultural contexts, individuals, institutions, events and national and international perspectives is used to investigate changing conceptions and practices of arts education.

EDCI602 The Teaching of Aesthetics in the Public Schools (3 Credits)
Critical investigation of art, and curriculum implications.

EDCI603 Integrated Art Methods (3 Credits)
Builds upon the pedagogical foundation of an initial art education methods course and provides future art teachers with the means for developing PreK-12 art lesson/unit plans for a balanced qualitative art program for today’s diverse and inclusive schools/classrooms. Integrating art with other subject areas.
Prerequisite: EDCI680; or TLPL435.
Restriction: Must be in a major within the EDUC-Teaching and Learning, Policy and Leadership department.
Credit Only Granted for: EDCI423, EDCI603, or EDCI688D.
Formerly: EDCI688D.

EDCI604 Learning and Teaching in the Physical Sciences I (3 Credits)
Engagement in laboratory and inquiry-based methods to develop coherent understandings about the physical world and explore issues in the physical sciences. Personal engagements with phenomena and reflection on the learning and instructional experiences.
Restriction: Enrollment in an EDCI Outreach Program in science education; or must be in Curriculum and Instruction (Master's) program; or permission of instructor.
Credit Only Granted for: EDCI604 or EDCI688F.
Formerly: EDCI688F.

EDCI605 Learning and Teaching in the Physical Sciences II (3 Credits)
A second course in a sequence using laboratory and inquiry-based methods to study physical science learning and teaching. Candidates will move toward more sophisticated understandings of elementary/middle school curriculum topics in the physical sciences. Personal engagement with phenomena and reflection on the learning and instructional experiences.
Prerequisite: TLPL621; or permission of instructor.

EDCI606 Learning and Teaching Biological Sciences (3 Credits)
Engagement in laboratory and inquiry-based methods to develop coherent understandings about the natural world and explore issues learning in biology. Personal engagement with phenomena and reflection on the learning and instructional experiences.
Restriction: Enrollment in an EDCI Outreach Program in science education; or must be in Curriculum and Instruction (Master's) program; or permission of instructor.

EDCI607 Learning and Teaching in the Biological Sciences II (3 Credits)
A second course in a sequence using laboratory and inquiry-based methods to study learning and teaching in biology. Candidates will move toward more sophisticated understandings of elementary/middle school curriculum topics in the life sciences. Personal engagement with phenomena and reflection on the learning and instructional experiences.
Prerequisite: TLPL623; or permission of instructor.

EDCI611 Studying Student Learning in Diverse Settings (3 Credits)
This course deepens teacher understanding of student development and the cultural context for teaching through readings and focused field studies. Participants will also begin developing skills needed for investigations using methods of interpretive inquiry.
EDCI612 Assessing Student Learning and Development (3 Credits)
Prepares experienced teachers to assess student knowledge, strategies and skills over time so that they can design instruction that builds on student strengths and addresses student needs. Teachers will study the purposes of assessment including school and student needs. Teachers will study the purposes of assessment including school and teacher accountability, student placement, course grade assignment and instructional design. They will also explore types of formal and informal assessment, curriculum-based and curriculum-free assessment, external and teacher made assessment.
Credit Only Granted for: EDCI612 or EDCI788S.
Formerly: EDCI788S.

EDCI613 Practice and Theory in Teaching Second Language Learners (3 Credits)
Focuses on issues that arise while teaching second language (ESOL or foreign language) learners. Supports implementation of theory into practice and research-based best practices during teaching internship, and completion of teaching portfolio during a second field experience.
Corequisite: EDCI637 or EDCI689; or permission of EDCI-Teaching and Learning, Policy and Leadership department.
Credit Only Granted for: EDCI613 or EDCI688B.
Formerly: EDCI688B.

EDCI614 Developing a Professional Portfolio (3 Credits)
Students will examine issues of performance assessment and develop professional portfolios following the guidelines established by the National Board of Professional Teaching Standards. Drawing on the research data collected throughout their program and relying on inquiry, reflections, and analysis, they will synthesize and present the body of their teaching experience.

EDCI618 Proseminar for Teaching Internship (1-3 Credits)
Supports and complements candidates’ internship experiences. Extends skills in implementing less plans (lesson planning), culturally competent teaching, classroom management, issues of professionalism, and portfolio development.
Prerequisite: Admission to a masters certification program in EDCI.
Corequisite: Participation in an arranged school placement.
Formerly: EDCI688E.

EDCI619 Developing a Professional Portfolio (1-3 Credits)
Students will examine issues of performance assessment and develop professional portfolios following the guidelines established by the National Board for Professional Teaching Standards. Drawing on the research data collected throughout their program and relying on inquiry, reflections, and analysis, they will synthesize and present the body of their teaching experience.
Repeatable to: 3 credits.
Credit Only Granted for: EDCI614 or EDCI619.

EDCI620 Trends in Secondary School Curriculum: Social Studies (3 Credits)
Recent developments in educational thinking and practice on the curriculum in social studies.

EDCI622 Teaching Social Studies in Elementary Schools (3 Credits)
Examination of current literature and research in the social sciences as they relate to social studies curriculum and instruction.

EDCI625 Reading, Cognition, and Instruction: Reading in the Content Areas I (3 Credits)
Provides middle and secondary education students with an understanding of the interactive nature of the reading process, the use of research-based instructional strategies, the relationship between vocabulary development and student concept development, the design of strategic reading instruction, the methods for assessing content area literacy, and the ability to plan instruction and communicate with students, parents, and allied professionals.

EDCI626 Processes and Acquisition of Reading (3 Credits)
Addresses the ways in which social, cultural, cognitive and motivation factors influence the development of literacy. Focus is on reading acquisition and its underlying processes. Topics include language development in relation to reading development; the biological basis of this development; concepts in emergent literacy; models of reading acquisition and skilled reading; the effects of phonemic awareness and phonics on developing readers; factors in early childhood environments and in beginning literacy instruction that impact language and literacy achievement.
Restriction: For Master's Certification Students only; or permission of EDCI-Teaching and Learning, Policy and Leadership department.
Credit Only Granted for: EDCI 626 or EDCI 765.
Formerly: EDCI 765.

EDCI627 Secondary Social Studies Pedagogy (3 Credits)
The second course in a three-course teaching methods sequence. Addresses two key questions: (1) How do secondary school students think about and learn history/social studies? (2) How can secondary teachers teach history/social studies in ways that promote student learning?
Prerequisite: EDCI426; or EDCI680.
Credit Only Granted for: EDCI627 or EDCI788Y.
Formerly: EDCI788Y.

EDCI630 Foundations of Second Language Education: Legal, Social and Historical Trends and Issues (3 Credits)
Knowledge of history, research, current practice and public policy issues in the field of second language education from kindergarten to post-secondary settings. Required for TESOL certification program.

EDCI631 Student Assessment in the Second Language Classroom (3 Credits)
Analysis of standardized and teacher-made FL/ESL tests; emphasis on principles of FL/ESL test construction. Field testing of commercial and teacher-made materials.

EDCI632 Special Education and Oral Language Development in TESOL (3 Credits)
Understanding of pre-referral, referral, assessment and identification process, as well as instruction of English Language Learners with learning disabilities. Required for TESOL Certification program.
Credit Only Granted for: EDCI632 or EDCI788L.
Formerly: EDCI788L.

EDCI633 Teaching for Cross Cultural Communication (3 Credits)
Theories of intercultural communication and techniques for applying them in the teaching of English as a second language (ESL) and content classes. Research and evaluation of selected aspects of a culture as basis for creating, selecting and using culturally-responsive teaching materials and methods.
EDCI634 Methods of Teaching ESOL (3 Credits)
This course presents a survey of the historical and current approaches, methods, and techniques of teaching English to speakers of other languages, from grammar to translation to audiolingual and communicative approaches. Additionally, successful classroom practices that address the needs of culturally diverse and language minority students will be analyzed.

EDCI635 English Grammar for Teachers of English to Speakers of Other Languages (3 Credits)
English grammar and methods of teaching grammar for graduate, prospective and current teachers of English to speakers of other languages. Analysis of the major grammatical structures of American English. Discussion of the role of teaching grammar, and effective classroom methods and techniques for the English as a second/foreign language classroom.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI637 Internship in World Language/TESOL Education (2-6 Credits)
Practical experience as a full-time intern with a fully licensed World Language/TESOL teacher in a diverse school setting; assigned professional responsibilities and participates in teaching/learning experiences.
Prerequisite: EDCI434 and EDCI634; or permission of EDUC-Teaching, Learning, Policy and Leadership department.
Additional Information: Internship lab fee applies. See current program description for details.

EDCI640 Trends in Secondary School Curriculum: English (3 Credits)
Recent developments in educational thinking and practice on the curriculum in English education.

EDCI643 Teaching Language Arts in Elementary Schools (3 Credits)
Analysis of current issues, trends, and problems in language-arts instruction.

EDCI645 Teaching and Learning Geometry in the Middle Grades (3 Credits)
Designed to enhance both the pedagogical and statistical/data analysis knowledge of middle school mathematics teachers.
Prerequisite: Admission to M.A. or M.Ed. with concentration in Mathematics Education; or permission of EDCI-Teaching and Learning, Policy and Leadership department.
Credit Only Granted for: EDCI645 or EDCI688C.
Formerly: EDCI688C.

EDCI646 Coaching and Mentoring Teachers: Literacy Across Content Areas (3 Credits)
Provides knowledge on coaching and mentoring teachers in school district and school settings based on Standards for Middle and High School Literacy Coaches as well as current theory, research and best practice supporting the efficacy of literacy coaching. Emphasis on understanding reading process/strategy instruction; writing process/strategy instruction; and gathering and interpreting valid and reliable assessment data for creating district-wide and school-based literacy intervention plans.
Prerequisite: Enrolled in EDCI post-baccalaureate certificate Program in Literacy coaching.
Restriction: Must be in Curriculum and Instruction (Master’s) program; and permission of instructor.
Credit Only Granted for: EDCI646 or EDCI788M.
Formerly: EDCI788M.

EDCI650 Trends in Mathematics Education (3 Credits)
Recent developments in educational thinking and practice which have affected the curriculum in mathematics.

EDCI651 Teaching and Learning Mathematics in Secondary Schools (3 Credits)
Objectives, selection and organization of subject matter, appropriate methods, lesson plans, textbooks, technology and other instructional materials; assessment of student learning and other topics pertinent to secondary mathematics education. Internship of other placement in a secondary mathematics classroom is required.
Prerequisite: Enrollment in a University of Maryland program leading to teacher certification; and bachelor’s degree in mathematics or related field; and 2 semesters of calculus.

EDCI652 Teaching and Learning Mathematics in the Elementary School (3 Credits)
Strategies and methodologies for the teaching of elementary school mathematics based on current research and theories about how children learn mathematics. Attention is given to professional recommendations and teaching practices that foster communication, reasoning, and reflection in the mathematics classroom. Internship or other placement in an elementary school is required.
Prerequisite: MATH212, MATH213, or MATH214; or students who have taken courses with comparable content may contact the department.

EDCI653 Problem-Solving and Innovative Thinking in the Mathematics Classroom (3 Credits)
Curriculum and instruction for developing thinking skills through the discipline of mathematics. This is a hybrid course designed to blend on-campus class meetings with online experiences.
Prerequisite: Experience teaching mathematics K-12. And TLPL312; or TLPL413; or students who have taken courses with comparable content may contact the department.

EDCI654 Assessing Mathematical Understanding (3 Credits)
Techniques of assessing k-12 students’ understanding of mathematics - including standardized tests, but focusing on alternative forms such as individual interviews, writing tasks, performance tasks, portfolios. Mathematics assessment viewed as an ongoing part of instruction.
Prerequisite: EDCI650; or permission of EDCI-Teaching and Learning, Policy and Leadership department.

EDCI655 Teaching and Learning Algebra in the Middle School (3 Credits)
Designed to enhance middle school mathematics teachers' content and pedagogical knowledge in algebra.
Prerequisite: Admission to M.A. or M.Ed. with concentration in Mathematics Education; or permission of EDCI-Teaching and Learning, Policy and Leadership department.

EDCI656 Teaching and Learning Statistics in the Middle School (3 Credits)
Designed to enhance both the pedagogical and statistical/data analysis content knowledge of middle school mathematics teachers.
Prerequisite: Admission to M.Ed. or M.A. program in EDCI with concentration in Mathematical Education.

EDCI657 Understanding and Engaging Students’ Conceptions of Mathematics (3 Credits)
Research related to K-12 students’ common errors in and (mis)understandings of mathematics. Instructional strategies useful in building on errors and changing students’ conceptions.
Prerequisite: Experience in teaching math; or permission of EDCI-Teaching and Learning, Policy and Leadership department.
EDCI660 Foundations of Reading (3 Credits)
Broad and comprehensive overview of reading and literacy and factors that may influence effective reading practices such as instruction, classroom environment and individual differences. Focus on different knowledge domains and traditions of inquiry related to reading and reading instruction.
Prerequisite: EDCI362; or TLPL462; or students who have taken courses with comparable content may contact the department.

EDCI661 Content Area Reading (3 Credits)
Research-based strategies for improving reading to learn in the content areas (K-12).
Prerequisite: EDCI362; or TLPL462; or students who have taken courses with comparable content may contact the department.

EDCI662 Diagnostic Reading Assessment and Instruction (3 Credits)
Survey course in diagnostic reading assessment and instruction for graduate students not majoring in reading.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI663 Understanding, Evaluating and Using Research in School Reading Programs (3 Credits)
Focus on understanding, critiquing, and applying reading/literacy research; reviewing research to improve practice; analyzing data at the district, school, classroom, and student levels to improve reading instruction.

EDCI664 Clinical Assessment in Reading (3 Credits)
Clinical diagnostic techniques and materials for assessing reading strengths and needs.
Prerequisite: EDCI661 and EDCI663; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI665 Clinical Instruction in Reading (3 Credits)
Clinical procedures and materials for reading instruction.
Prerequisite: TLPL653; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI666 Leadership in Schoolwide Reading Program (3 Credits)
Preparation of reading personnel to function as resource persons to classroom teachers, administrators and the school community.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI667 Multicultural Materials and Instruction for K-12 Readers (3 Credits)
An exploration of the multicultural materials and instructional strategies that create responsive K-12 classrooms and curricula for diverse readers.
Credit Only Granted for: EDCI667 or EDCI688E (as offered in Spring 2008).
Formerly: EDCI688E.

EDCI670 Trends in School Curriculum: Science (3 Credits)
Recent developments in educational thinking and practice on the curriculum in science education.

EDCI671 Teaching Science in Elementary Schools (3 Credits)
Identification of problems in teaching science. Methods for improving the effectiveness of science education.

EDCI673 Assessing, Diagnosing, and Teaching Writing (3 Credits)
Examines current theory, research, best practice, curricula and materials for teaching written communication in middle and secondary schools in order to survey, review and select formal and informal assessments and diagnostic strategies useful for writing teachers. Focuses on validity and reliability issues. Includes instructional planning and development of instructional materials for implementing appropriate individual, small-group and large-group instruction. English Language Learner (TESOL and SIOP) and special needs (inclusion) pupil issues considered.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI675 Learning to Teach and Learn Science (3 Credits)
Developing practices of instruction in science teaching in the context of understanding student science learning.
Prerequisite: TLPL420; or permission of EDUC-Teaching and Learning, Policy and Leadership department.
Restriction: Must be in the Maryland Master’s Certification program; or permission of EDUC-Teaching and Learning, Policy and Leadership department.
Credit Only Granted for: EDCI675 or EDCI788V.
Formerly: EDCI788V.

EDCI676 Reflection and Practice in Secondary School Science Teaching (3 Credits)
Use of classroom videotape and student work as data for teachers to analyze their students’ thinking and discuss instructional interpretation, strategies, and techniques in the specific contexts of their classes.
Prerequisite: TLPL626; or permission of instructor.
Restriction: Must be in the Maryland Master’s Certification program.

EDCI677 Computers in Science Education (3 Credits)
Current and projected methods by which computers can augment classroom and laboratory-based science instruction in school and non-school settings.
Prerequisite: Must have completed EDCI487; or students who have taken courses with comparable content may contact the department.

EDCI682 Reframing Teacher Professionalism: Achieving Teacher Leadership (3 Credits)
Understanding the profession of teaching, teacher leadership, and the knowledge base that undergirds the teaching profession. Multiple perspectives on teaching in the current debate on school reform and how they are aligned across the political spectrum.

EDCI683 Teaching and Learning Number in the Middle Grades (3 Credits)
Examines current theory, research, best practice, curricula and materials for teaching written communication in middle and secondary schools in order to survey, review and select formal and informal assessments and diagnostic strategies useful for writing teachers. Focuses on validity and reliability issues. Includes instructional planning and development of instructional materials for implementing appropriate individual, small-group and large-group instruction. English Language Learner (TESOL and SIOP) and special needs (inclusion) pupil issues considered.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI685 Research Methods (3 Credits)
The interpretation and conduct of research in curriculum and instruction.

EDCI687 Learning with Technology (3 Credits)
Review and analysis of topics related to learning with technology. Topics include but are not limited to: teaching, learning, and design theories, new and emerging technologies, innovative uses of technology in formal and informal education. Topics will vary with instructor expertise, check with instructor for specific areas of emphasis.
EDCI688 Special Topics in Curriculum and Instruction (1-3 Credits)
Current topics and issues in teaching.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI689 Teaching Internship (1-9 Credits)
Internship experiences in elementary or secondary teaching with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to graduate teacher education program option.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.
Repeatable to: 12 credits if content differs.

EDCI690 Teaching as a Profession (3 Credits)
The profession of teaching and the knowledge base that defines teaching. Current and social issues that affect teaching and learning; role of research and experience in learning to teach.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI691 Models of Teaching: Theories and Applications (3 Credits)
Theory and research on teaching as applied to models of instruction. Practice in developing an initial repertoire of teaching models and in providing thoughtful critique of teaching based on these models.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI694 Transformative Pedagogy and School Subjects (3 Credits)
Examines the potential of various pedagogies to be transformative in relation to school subject matters, school identities, and school contexts.

EDCI695 Teaching Science and Social Studies through Environmental Study (3 Credits)
Curriculum and instruction for science and social studies within a multicultural and environmental context; analysis of social studies and science curriculum materials; utilization of school and community resources.
Restriction: Must be in a major within the EDUC-Teaching and Learning, Policy and Leadership department.

EDCI697 Embracing Diversity in Classroom Communities (3 Credits)
The course aims to help students understand race, class, gender, and sexuality as systems of privilege, exclusion, marginalization, and the centrality of embracing diversity in the classroom communities to promote the success of all students.

EDCI698 Special Topics in Curriculum and Instruction (1-3 Credits)
Current topics and issues in teaching.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI699 Models of Teaching: Theories and Applications (3 Credits)
Theory and research on teaching as applied to models of instruction. Practice in developing an initial repertoire of teaching models and in providing thoughtful critique of teaching based on these models.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI700 Teaching as a Profession (3 Credits)
The profession of teaching and the knowledge base that defines teaching. Current and social issues that affect teaching and learning; role of research and experience in learning to teach.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI701 Models of Teaching: Theories and Applications (3 Credits)
Theory and research on teaching as applied to models of instruction. Practice in developing an initial repertoire of teaching models and in providing thoughtful critique of teaching based on these models.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI720 Theory and Research in Social Studies Education (3 Credits)
A survey of the research literature; evaluation of research techniques; consideration of relevant instructional curriculum theory; evaluation of modern teaching methods and techniques.
Prerequisite: TPLPL684; or TPLPL685.

EDCI730 Language and Education (3 Credits)
Dialect, language varieties in school settings; historical and current perspectives on the role of language in learning; theories of school achievement and consequences for language assessment.

EDCI732 Second Language Acquisition (3 Credits)
Major theoretical approaches to second language acquisition. For teaching English to speakers of other languages (TESOL).
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI734 Teaching English Language Learners: Current and Future Research Directions (3 Credits)
Research on the preparation of generalists and specialists teaching English Language Learners. Current research and future research directions.
Prerequisite: EDCI780 or TPLPL662; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI735 Research Foundations of Second Language Education: Examining Linguistically Diverse Student Learning (3 Credits)
Critically examine theories of second language acquisition and research in applied linguistics relevant to linguistically diverse students and learners of English as an additional language. Analysis of research from linguistic, psycholinguistic, sociolinguistic and sociocultural perspectives, with an emphasis on the social contexts of second language learning and teaching.
Prerequisite: TPLPL664 or TPLPL662; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Or permission of instructor.

EDCI740 Theory and Research in English Education (3 Credits)
A survey of the research literature; evaluation of research techniques; consideration of relevant instructional curriculum theory; evaluation of modern teaching methods and techniques.

EDCI745 Theory and Research in Written Communication (3 Credits)
Analysis and synthesis of recent theoretical trends in writing research; the reading and critiquing of representative research studies. The study of research methods for conducting disciplined inquiry in written communication.
Recommended: TPLPL691.

EDCI752 Second Language Acquisition (3 Credits)
Major theoretical approaches to second language acquisition. For teaching English to speakers of other languages (TESOL).
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI754 Teaching English Language Learners: Current and Future Research Directions (3 Credits)
Research on the preparation of generalists and specialists teaching English Language Learners. Current research and future research directions.
Prerequisite: EDCI780 or TPLPL662; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI755 Research Foundations of Second Language Education: Examining Linguistically Diverse Student Learning (3 Credits)
Critically examine theories of second language acquisition and research in applied linguistics relevant to linguistically diverse students and learners of English as an additional language. Analysis of research from linguistic, psycholinguistic, sociolinguistic and sociocultural perspectives, with an emphasis on the social contexts of second language learning and teaching.
Prerequisite: TPLPL664 or TPLPL662; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Or permission of instructor.

EDCI760 Theory and Research in Mathematical and Scientific Thinking and Learning (3 Credits)
Study of mathematical and scientific thinking by students at various levels of schooling considered from the perspective of those classic and contemporary theories of learning that are particularly relevant to the study of mathematics and science. Exploration of what it means to understand mathematics and science.
Prerequisite: Admitted to Doctoral Program in Mathematics Education or Science Education; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI762 Foundations of Mathematics Education II: Theory and Research on Mathematics Teaching (3 Credits)
Knowledge of and insights into how mathematics has been and is being taught; theories about how it might be taught. Familiarity with the methods used to do research on teaching and to improve teaching.
Prerequisite: TPLPL710; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI763 Foundations of Mathematics Education III: Curriculum (3 Credits)
The study of curriculum in mathematics and research on curriculum. The relationship of mathematics and school mathematics; the forms, purposes, development, and evaluation of mathematics curricula.
Prerequisite: Admitted to Mathematics Education Doctoral Program; or permission of EDUC-Teaching and Learning, Policy and Leadership department.
EDCI754 Mathematics and Science Education Policy, Professional Development and Teacher Preparation (3 Credits)
Preservice teacher education, professional development, and policy as agents of reform in mathematics education and in science education.
Prerequisite: Admitted to Doctoral Program in Mathematics Education or Science Education; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI758 Research Seminar in Mathematics and Science Education (1 Credit)
Read, plan, conduct, and report on research projects and research topics in mathematics and science education. Projects may be faculty/student projects, or group or individual student projects (may or may not be related to a dissertation). Emphasis on framing researchable questions and designing/analyzing research studies. Faculty and peer feedback and interaction are crucial expectations.
Prerequisite: Admission to Doctoral Program in Mathematics or Science Education; and must have completed or be concurrently enrolled in TLPL710 or TLPL713.
Repeatable to: 9 credits if content differs.

EDCI761 Advanced Clinical Practices in Reading Assessment (3 Credits)
Clinical practicum in assessment focusing on strengths and needs in reading. Case report writing and conferences.
Prerequisite: TLPL654.
Corequisite: EDCI762.

EDCI762 Advanced Clinical Practices in Reading Instruction (3 Credits)
Clinical practicum in instruction focusing on instructional techniques and diagnostic teaching.
Prerequisite: TLPL654.
Corequisite: TLPL733.

EDCI764 Writing Across the Curriculum (3 Credits)
Emphasis on providing secondary education majors with an interdisciplinary foundation in current theory, research, and best practice focused on the teaching of writing across the curriculum, e.g., art, English, foreign languages and TESOL, language arts, mathematics, music, sciences, and social studies. Exceptional student, inclusion, and diversity issues will be discussed.

EDCI769 Theory and Research in Reading (3 Credits)
Survey of the literature in reading and allied fields, and an examination of current research trends and methodologies.
Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department.
Repeatable to: 6 credits if content differs.

EDCI770 Foundations of Science Education (3 Credits)
Development of science education; pre-kindergarten through college; the influences on current and future practices; and the identification and critical analysis of topics in science education.
Prerequisite: TLPL620 or TLPL625; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI775 Seminar in Mixed Methods Research in Education (3 Credits)
Examination of epistemological and methodological issues involved in conducting mixed methods studies in education. Students design and conduct analyses using existing datasets that include qualitative and quantitative data. They formulate appropriate research questions, consider alternative mixed methods designs, and address methodological complexities associated with working with qualitative and quantitative data in a single study.
Prerequisite: EDMS646; and (EDCI791 or EDHI700); and permission of EDUC-Teaching and Learning, Policy and Leadership department.
Recommended: EDCI792.
Credit Only Granted for: EDCI 788A, EDPS 788A, EDCI 775, EDPS 775.
Formerly: EDCI 788A, EDPS 788A.

EDCI776 Urban Education (3 Credits)
This seminar provides students with a broad overview of urban education as a field of inquiry by examining the social context of urban schools, how transformative pedagogy is practiced and conceptualized as well as school reform.

EDCI780 Theory and Research on Teaching (3 Credits)
Analysis of the interactive process of instruction; preschool through higher education in school and non-school settings; future directions and needed research.

EDCI783 Theory and Research in Computer Education (3 Credits)
Examination of the current research and theory in the instructional uses of computers, instructional tutoring systems, computer programming environments, computer-based laboratories and problem solving environments in educational settings.
Prerequisite: TLPL600, EDMS645, and TLPL691; or permission of EDUC-Teaching and Learning, Policy and Leadership department.

EDCI784 Teaching, Professional Development and School Change (3 Credits)
Examines current scholarship on professional development for K-12 teachers, characteristics of good professional development, and its relationship to teaching, learning, and school improvement.

EDCI785 Teacher Preparation, Diversity, and Social Change (3 Credits)
A critical examination of the theory and research on Teacher preparation with an emphasis on issues of race, class, gender, and sexuality and the pervasive inequalities manifest in K-12 school contexts.

EDCI786 Black and Latino Education: History and Policy (3 Credits)
Examination of the historical legacies and contemporary policies that have contributed to the educational status (K-20) of Blacks and Latinos in the United States from the 19th century to the present. Issues surrounding language, immigration, racism, social class, and state and federal policies will also be analyzed.
Recommended: EDCI776; and completion of EDSP611 recommended.

EDCI788 Selected Topics in Teacher Education (1-3 Credits)
Current topics and issues in teacher education.
Repeatable to: 6 credits if content differs.

EDCI790 Epistemological Bases of Education Research (3 Credits)
A course on research theory, method, and design issues for doctoral students. Focuses on conceptual and theoretical understanding of methodology, the broad range of both qualitative and quantitative methodologies, and underlying epistemologies as they apply to the study of schools, curriculum, teaching, and teacher education.
Prerequisite: EDCI780.
EDCI791 Qualitative Research I: Design and Fieldwork (3 Credits)
Builds on EDCI790 to examine in more depth the theoretical and epistemological moorings of different types of qualitative research. Students apply selected field research methods to problems of professional practice in schools and communities while considering central issues and dilemmas that arise while engaging in fieldwork.
Prerequisite: EDCI790.
Formerly: EDCI684.

EDCI792 Qualitative Research II: Analysis and Interpretation of Data (3 Credits)
Uses data collected in EDCI791 to consider methods of ongoing data analysis, ways of knowing and writing about field research, issues of reflexivity, and the ethical and political decisions involved in crafting text. Students will read literature on and exemplars of multiple modes of qualitative data analysis and interpretation.
Prerequisite: TLPL791.
Credit Only Granted for: EDCI692 or EDCI792.
Formerly: EDCI692.

EDCI798 Special Problems in Teacher Education (1-6 Credits)
Intended for Masters, AGS, or doctoral students in education who desire to pursue a research problem.
Restriction: Permission of EDUC-Teaching, Learning, Policy and Leadership department.

EDCI799 Master's Thesis Research (1-6 Credits)

EDCI820 Seminar in Social Studies Education (3 Credits)

EDCI822 Seminar in Secondary Education (3 Credits)

EDCI840 Seminar in English Education (3 Credits)

EDCI858 Seminar in Mathematics Education (1-3 Credits)
Survey and analysis of literature on an identified research topic in mathematics education. Design and implementation of a research study to investigate the identified topic.
Repeatable to: 6 credits.

EDCI860 Seminar in Reading Education (3 Credits)

EDCI861 Research Methods in Reading (3 Credits)
Current research questions and methods culminating in a study suitable for submission to journals. Emphasis on using and conducting research.

EDCI870 Seminar in Science Education (3 Credits)

EDCI888 Apprenticeship in Education (1-8 Credits)
Apprentice practice under professional supervision. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.
Restriction: Permission of EDUC-Teaching, Learning, Policy and Leadership department.

EDCI889 Internship in Education (3-8 Credits)
Internship experiences with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.
Restriction: Permission of EDUC-Teaching, Learning, Policy and Leadership department.

EDCI898 Pre-Candidacy Research (1-8 Credits)
EDCI899 Doctoral Dissertation Research (1-8 Credits)