C I 201: Learning Technologies in the PK-6 Classroom
(2-2) Cr. 3. F.S. Alt. SS., offered odd-numbered years.
Overview of ways to use educational technologies to support instruction in PK-6 settings. Focus on pedagogical approaches that integrate technologies to support learning in the content areas. Laboratory experiences include development of activities to use tool software, multimedia, web page development, digital video and other technologies to facilitate learning and teaching.

C I 202: Learning Technologies in the 7-12 Classroom
(2-2) Cr. 3. F.S. Alt. SS., offered even-numbered years.
Overview of ways to use educational technologies to support instruction in 7-12 settings. Focus on pedagogical approaches that integrate technologies to support learning in the content areas. Laboratory experiences include development of activities to use tool software, multimedia, web page development, digital video and other technologies to facilitate learning and teaching.

C I 204: Social Foundations of Education in the United States
(3-0) Cr. 3. F.S. SS.
Introduction to the historical and contemporary landscape of schooling in the United States. Emphasis is placed on topics and tensions in the relationship between school and society (e.g. equity of access to education and competing purposes of education) and the implications of these topics and tensions for teaching and learning in public schools. Designed for prospective teachers.

C I 208: Early Childhood Education Orientation
(Cross-listed with HD FS). Cr. 1. F.S.
Prereq: classification as ECE major
Overview of early childhood education (birth-grade 3) teacher licensure requirements. Program planning and university procedures. Required of all students majoring in early childhood education. Offered on a satisfactory-fail basis only.

C I 216: Learning Community Orientation to Teacher Education
(1-0) Cr. 1. F.
Prereq: First semester freshman Elementary Education major or other majors interested in seeking pre-K to grade 12 teacher certification
Learning community for transition to university community life. Overview of pre-K to grade 12 teacher certification requirements in Iowa and other states. Program and career planning. Offered on a satisfactory-fail basis only.

C I 219: Orientation to Teacher Education: Math, Science, FCS Education, and History/Social Science Majors
Cr. 1. F.S.
Prereq: Students seeking teacher licensure in mathematics, science family and consumer sciences, or history/social sciences in grades 5-12
Overview of mathematics, science, family and consumer sciences and history/social sciences secondary education (grades 5-12), teacher licensure requirements in Iowa and other states. Program and career planning. Offered on a satisfactory-fail basis only.

C I 245: Strategies in Teaching
(2-2) Cr. 3. F.S.
Prereq: C I 204; sophomore standing
Introduction to elementary education teaching strategies, classroom management, and curriculum organization. Open to students in the elementary education curriculum or the early childhood education curriculum.

C I 280: Pre-Student Teaching Experience I
(1-8) Cr. 0.5-2. Repeatable. F.S.
Pre-Student teaching experience in area educational settings. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280A: Pre-Student Teaching Experience I: Core Experience
(1-8) Cr. 1-2. Repeatable. F.S.
Prereq: Restricted to students with admission to teacher education.
Pre-Student teaching experience in school settings. 1/2 day of time needed. Clinical Experience Level 2. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280B: Pre-Student Teaching Experience I: Learning Technologies
(1-8) Cr. 1-2. Repeatable. F.S.
Prereq: C I 201 or C I 202. Permission of instructor for 2 credits.
Pre-Student teaching experience in learning technologies in school settings. 2 1/2-hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280C: Pre-Student Teaching Experience I: Native American Tutoring
(1-8) Cr. 1. Repeatable. F.S.
Pre-Student teaching experience in Native American tutoring in school settings. 2 1/2 hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280D: Pre-Student Teaching Experience I: Museum Education
(1-8) Cr. 1. Repeatable. F.S.
Prereq: Completion of or concurrent enrollment in C I 280A.
Pre-Student teaching experience in museum settings. 2 1/2-hour blocks of time needed. Supervision level 1. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280E: Pre-Student Teaching Experience I: Multicultural Youth
(1-8) Cr. 1-2. Repeatable. F.S.
Prereq: C I 280A must be either a prerequisite or taken currently; permission of instructor for 2 credits.
Pre-Student teaching experience for multicultural youth in school settings. 2 1/2-hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280F: Pre-Student Teaching Experience I: Mild/Moderate Disabilities
(1-8) Cr. 1-2. Repeatable. F.
Prereq: Admission to teacher education; concurrent enrollment in SP ED 330.
Pre-Student teaching experience in mild/moderate disabilities in school settings. 2 1/2-hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only.
C I 280K: Pre-Student Teaching Experience I: Music  
(Cross-listed with MUSIC). Cr. 0.5. Repeatable. S.  
Pre-student teaching experience in music in school settings. Permission of Music coordinator required prior to enrollment. Clinical Experience Level 1. Offered on a satisfactory-fail basis only.

C I 280L: Pre-Student Teaching Experience I: Secondary Education  
Cr. 0.5. Repeatable. F.S.  
Pre-student teaching experience for secondary education students in school settings. 2 1/2 hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only.

C I 280M: Pre-Student Teaching Experience I: Secondary Science  
(1-8) Cr. 1-2. Repeatable. S.  
Prereq: Permission of instructor for 2 credits.  
Pre-student teaching experience in secondary science in school settings. 2 1/2-hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280N: Pre-Student Teaching Experience I: Learning Community  
(1-8) Cr. 1. Repeatable. F.S.  
Prereq: Permission of department required.  
Pre-student teaching experience for Preparing Tomorrow's Teachers learning community students in school settings. 2 1/2-hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280O: Pre-Student Teaching Experience I: Art Education  
(1-8) Cr. 1. Repeatable. F.S.  
Prereq: Permission of the Art and Design Department required.  
Pre-student teaching experience in art education in school settings. 2 1/2-hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280S: Pre-Student Teaching Experience I: English as a Second Language (ESL)  
(0-4) Cr. 1. Repeatable, maximum of 2 times. F.S.  
Prereq: Admission to teacher education.  
Pre-student teaching experience in English as a Second Language. 1/2 day of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only.

C I 280T: Pre-Student Teaching Experience I: Tutoring  
Cr. 1. Repeatable. F.S.  
Prereq: Permission of instructor  
Pre-student teaching experience tutoring in a school setting focused on mathematics, literacy, and/or other content areas. Two, one-hour blocks of time per week needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only.

C I 290: Independent Study  
Cr. 1-3.  
Prereq: 6 credits in education, permission of department chair  
Independent study, under faculty supervision, of a topic in the field of education.
C I 395: Content Area Reading and Literacy
(Dual-listed with CI 595). (3-0) Cr. 3. F.S.
Prereq: CI 204 and junior standing
Analysis and application of strategies to enhance students' literacy development in middle and secondary school settings.

C I 406: Multicultural Foundations of School and Society: Introduction
(3-0) Cr. 3. F.S.SS.
Prereq: CI 201 or CI 202, CI 332 or CI 333, junior classification, admission to teacher education program
Awareness and nature of cultural pluralism; need for multicultural education; multicultural concepts and theories; cultural groups - their perceptions, needs, and contributions; problems and issues regarding ethnocentrism, prejudice, and discrimination based on race, ethnicity, socioeconomic class, sex/gender, sexual identity, and language in the school environment; curriculum infusion and transformation, multicultural interaction, design and execution of teaching strategies. Meets U.S. Diversity Requirement

C I 407: Principles and Practices of Distance Learning
(Dual-listed with CI 507). (2-2) Cr. 3. F.S.S.
Prereq: CI 201 or CI 202; convenient access to the Web
Review of flexible and distance learning (FDL) cases in a variety of contexts and pedagogic styles, identification of underlying principles and frameworks for best practice in this field.

C I 416: Supervised Student Teaching - Elementary
Cr. arr. F.S.
Prereq: GPA 2.5; full admission to teacher education; senior classification; CI 378, CI 443, CI 448, CI 449; reservation required
Supervised teaching experience in the elementary grades.

C I 416A: Supervised Student Teaching - Elementary: Primary grades
(K-3)
Cr. arr. F.S.
Prereq: GPA 2.5; full admission to teacher education; senior classification; CI 378, CI 443, CI 448, CI 449; reservation required
Supervised teaching experience in the elementary grades.

C I 416B: Supervised Student Teaching - Elementary: Intermediate grades
(4-6)
Cr. arr. F.S.
Prereq: GPA 2.5; full admission to teacher education; senior classification; CI 378, CI 443, CI 448, CI 449; reservation required
Supervised teaching experience in the elementary grades.

C I 416C: Supervised Student Teaching - Elementary: World Language
Cr. arr. F.S.
Prereq: GPA 2.5; full admission to teacher education; senior classification; CI 378, CI 443, CI 448, CI 449; reservation required
Supervised teaching experience in the elementary grades.

C I 416D: Supervised Student Teaching - Elementary: International Student Teaching - Primary Grades
Cr. arr. F.S.
Prereq: GPA 2.5; full admission to teacher education; senior classification; CI 378, CI 443, CI 448, CI 449; reservation required
Supervised teaching experience in the elementary grades.

C I 416E: Supervised Student Teaching - Elementary: International Student Teaching - Intermediate Grades
Cr. arr. F.S.
Prereq: GPA 2.5; full admission to teacher education; senior classification; CI 378, CI 443, CI 448, CI 449; reservation required
Supervised teaching experience in the elementary grades.

C I 416Z: Supervised Student Teaching - Elementary: English as a Second Language
Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417A: Student Teaching: Social Studies-Middle School
(Dual-listed with CI 517A). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417B: Student Teaching: Physical Sciences
(Dual-listed with CI 517B). Cr. arr. F.S.
Prereq: Full admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in physical sciences grades 5-12.

C I 417C: Student Teaching: Mathematics
(Dual-listed with CI 517C). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417D: Student Teaching: Biological Sciences
(Dual-listed with CI 517D). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417E: Student Teaching: English and Literature
(Cross-listed with ENGL). Cr. arr. F.S.
Prereq: ENGL 494, admission to teacher education, approval of coordinator the semester prior to student teaching
Full-time teaching in secondary English: long term and unit planning, lesson planning, classroom teaching practice in English language arts.

C I 417G: Student Teaching: World Language
(Dual-listed with CI 517G). (Cross-listed with WLC). Cr. arr. F.S.
Prereq: minimum GPA of 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in world languages and cultures.
C I 417J: Student Teaching: Earth Sciences
(Dual-listed with C I 517J). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching.
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417M: Student Teaching: Science-Basic
(Dual-listed with C I 517M). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching.
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417N: Student Teaching: International
(Dual-listed with C I 517N). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching.
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417P: Student Teaching: Social Studies-High School
(Dual-listed with C I 517P). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching.
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417R: Student Teaching: Music-Elementary
(Dual-listed with C I 517R). (Cross-listed with MUSIC). Cr. arr. F.S.
Prereq: Minimum GPA of 2.5; Admission to teacher education, approval of coordinator during semester before student teaching.
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417S: Student Teaching: Music-Secondary
(Dual-listed with C I 517S). (Cross-listed with MUSIC). Cr. arr. F.S.
Prereq: Minimum GPA of 2.5; Admission to teacher education, approval of coordinator during semester before student teaching.
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 417Z: Student Teaching: English as Second Language
Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching.
Evaluation of instruction, lesson planning, and teaching in English as a Second Language grades 7-12.

C I 418: Secondary Science Methods I: A Research-Based Framework for Teaching Science
(Dual-listed with C I 518). (3-0) Cr. 3. F.
Prereq: C I 1280M or C I 514; undergraduate students must register concurrently for C I 347 and C I 468J.
Development of a research-based framework for teaching science that includes student goals, congruent student actions, the character and role of science inquiry, teaching behaviors and strategies, contemporary learning theories, and self evaluation.

C I 419: Secondary Science Methods II: Advancing A Research-Based Framework for Teaching Science
(Dual-listed with C I 519). (3-0) Cr. 3. S.
Prereq: C I 418 or C I 518, undergraduate students must register concurrently for C I 468K.
Advancing a research-based framework for teaching science in a variety of school settings, emphasizing the teacher’s role, the development and revision of science curriculum, exceptional learners, content area reading strategies, management strategies, technology and student assessment.

C I 420: Bilingualism, Bilingual Education, and U.S. Mexican Youth
(Dual-listed with C I 520). (3-0) Cr. 3. F.
Prereq: C I 406.
Introduction to research on bilingualism and examination of the social, historical, and political contexts of bilingual education in U.S. schools. Attention to policy environment, school program structure, mode of classroom instruction, family and community context, and attainment of bilingualism and biculturalism for U.S. Mexican youth.

C I 426: Principles of Secondary Education
(Dual-listed with C I 526). (3-0) Cr. 3. F.S.SS.
Prereq: C I 1202, senior classification, admission to teacher education program.
The curriculum, human relations, student evaluation, support services, classroom management, organization of schools, legal aspects of schools, professionalism, and career planning.

C I 433: Teaching Social Studies in the Primary Grades
(2-0) Cr. 2. F.S.
Prereq: C I 377, HD FS 224; concurrent enrollment in C I 439, SP ED 355, SP ED 455.
Emphasis is placed on providing appropriate social studies learning experiences (e.g., curriculum content, instructional strategies, and assessment) for primary grade children.

C I 438: Teaching Mathematics in the Primary Grades
(2-0) Cr. 2. F.S.
Prereq: HD FS 224, MATH 195, MATH 196 (minimum grade of C- in both Math 195 and MATH 196), concurrent enrollment in C I 377, C I 468F, C I 468G, SP ED 368.

C I 439: Teaching Science in the Primary Grades
(2-0) Cr. 2. F.S.
Prereq: C I 377, HD FS 224; concurrent enrollment in C I 433, C I 468I, SP ED 355, SP ED 455.
Study, development, and application of current methods for providing appropriate science learning experiences and processes for primary grade children. Formal and informal assessment strategies and instructional methods for diverse learners.

C I 442: The Teaching of Social Studies
(3-0) Cr. 3. F.S.SS.
Prereq: C I 377.
Emphasis is placed on providing appropriate social studies learning experiences (e.g., curriculum content, instructional strategies, and assessment) for primary and intermediate grade children.
C I 448: Teaching Children Mathematics  
(3-0) Cr. 3. F.S.SS.  
Prereq: MATH 195 (minimum grade of C), MATH 196 (minimum grade of C); concurrent enrollment in C I 377, C I 468A, C I 468C  
Study, development, and application of current methods for providing appropriate mathematical learning experiences for primary and intermediate children. Includes critical examination of factors related to the teaching and learning of mathematics.

C I 449: The Teaching of Science  
(3-0) Cr. 3. F.S.SS.  
Prereq: C I 377, concurrent enrollment in C I 378, C I 468B, C I 468D, junior classification  
Procedures for teaching science to children. Emphasis on developmental implications, teaching processes and methods, current programs, and assessment of learning in science.

C I 450: Ethnicity and Learning  
(Dual-listed with C I 550). (3-0) Cr. 3. Alt. S., offered even-numbered years.  
Prereq: C I 332 or C I 333, C I 406  

C I 452: Assessment for Literacy and Learning  
(Dual-listed with C I 552). (3-0) Cr. 3. F.S.SS.  
Prereq: C I 378 or equivalent  
Identification, analysis and correction of reading problems in five areas: print knowledge, integration of print knowledge, oral reading fluency, vocabulary, and comprehension.

C I 454: Emerging Topics in Learning Technologies  
(2-2) Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.  
Prereq: C I 201 or C I 202  
Development and application of emerging technology topics related to digital learning. Series of 1-3 credit on-line learning modules on topics such as grant writing, interactive on-line tools, social networking, gaming technologies, technology leadership in schools, and web/graphic design. Required for the Learning Technologies minor.

C I 456: Integrating Technology into the Reading and Language Arts Curriculum  
(Dual-listed with C I 556). (3-0) Cr. 3. F.S.SS.  
Prereq: C I 201 or C I 202, C I 377  
Methods and strategies used to integrate technology into the reading and language arts curriculum. Use and evaluation of reading and language arts software for elementary classrooms.

C I 468: Pre-Student Teaching Experience II  
Cr. 1-2. F.S.SS.  
Prereq: Admission to teacher education program  
Application of current methods, and instructional experiences with children in a supervised elementary, middle, or high school classroom while engaged in other methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468A: Pre-Student Teaching Experience II: Primary Grades, Reading and Language Arts  
Cr. 1. F.S.SS.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised K-3 elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468B: Pre-Student Teaching Experience II: Intermediate Grades, Reading and Language Arts  
Cr. 1. F.S.SS.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised 3-6 elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468C: Pre-Student Teaching Experience II: Primary Grades, Mathematics  
Cr. 1. F.S.SS.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised K-3 elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468D: Pre-Student Teaching Experience II: Intermediate Grades, Science  
Cr. 1. F.S.SS.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised 3-6 elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468E: Pre-Student Teaching Experience II: World Languages  
Cr. 1. F.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised K-6 elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468F: Pre-Student Teaching Experience II: Primary Grades Inclusive, Literacy  
Cr. 1. F.S.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised K-3 inclusive elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468G: Pre-Student Teaching Experience II: Primary Grades Inclusive, Mathematics  
Cr. 1. F.S.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised K-3 inclusive elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.
C I 468: Pre-Student Teaching Experience II: Primary Grades Inclusive, Science  
Cr. 1. F.S.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised K-3 inclusive elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468J: Pre-Student Teaching Experience II: Secondary Science I  
Cr. 2. F.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised 5-12 science classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468K: Pre-Student Teaching Experience II: Secondary Science II  
Cr. 2. S.  
Prereq: Admission to teacher education program  
Application of current methods and instructional experiences with children in a supervised grade 5-12 science classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 468R: Pre-Student Teaching Experience II: Intermediate Grades, Reading Endorsement  
Cr. 1. F.S.SS.  
Prereq: Admission to teacher education program. Permission of School of Education required; concurrent enrollment in C I 378  
Application of current methods and instructional experiences with children in a supervised 3-6 elementary classroom while engaged in other elementary methods courses. Clinical Experience Level 3. Offered on a satisfactory-fail basis only.

C I 469: Pre-student Teaching Seminar  
Cr. 1. Repeatable. F.S.  
Prereq: Admission to teacher education program.  
Future teachers learn about teaching as they connect theory, practice and classroom experiences. Learning is supported with video-based seminars focused on effective classroom practices. Offered on a satisfactory-fail basis only.

C I 480: Pre-Student Teaching Experience III  
Cr. 0.5-2. Repeatable, maximum of 2 times. F.S.  
Prereq: Admission to Teacher Education  
Observation and participation in a variety of school settings after admission to the teacher education program. Permission of area coordinator required prior to enrollment. (S/F grading may be used in some offerings of some sections.).

C I 480A: Pre-Student Teaching Experience III: History/Social Sciences  
(Cross-listed with HIST). Cr. 2. Repeatable, maximum of 2 times. F.  
Prereq: Admission to Teacher Education  
Supervised participation in a 5-12 school setting. Permission of History/Social Sciences coordinator required prior to enrollment. 1/2 day of time needed. Clinical Supervision Level 3.

C I 480B: Field Experience for Secondary Teaching Preparation: Physical Sciences  
Cr. 0.5. Repeatable, maximum of 2 times. F.S.  
Prereq: Permission of area coordinator required prior to enrollment  
Observation and participation in a variety of school settings after admission to the teacher preparation program. Physical Sciences.

C I 480C: Pre-Student Teaching Experience III: Mathematics  
Cr. 0.5-2. Repeatable, maximum of 2 times. F.S.  
Prereq: Admission to teacher education  
Supervised participation mathematics in a 5-12 school setting. Permission of mathematics coordinator required prior to enrollment. 1/2 day of time needed. Clinical Experience Level 3.

C I 480D: Field Experience for Secondary Teaching Preparation: Biological Sciences  
Cr. 0.5. Repeatable, maximum of 2 times. F.S.  
Prereq: Permission of area coordinator required prior to enrollment  
D. Biological Sciences.

C I 480E: Pre-Student Teaching Experience III: English  
Cr. 1-2. Repeatable, maximum of 2 times. F.S.  
Prereq: Admission to teacher education  
Supervised participation in a 5-12 school setting. Cross listed with English 480K. Permission of English coordinator required prior to enrollment. 1/2 day of time needed. Clinical Experience Level 3.

C I 480G: Pre-Student Teaching Experience III: World Languages and Cultures  
Cr. 1-2. Repeatable, maximum of 2 times. F.  
Prereq: Admission to teacher education  
Supervised participation in a 5-12 school setting. Permission of World Languages and Cultures coordinator required prior to enrollment. 1/2 day of time needed. Clinical Experience Level 3.

C I 480J: Field Experience for Secondary Teaching Preparation: Earth Science  
Cr. 0.5. Repeatable, maximum of 2 times. F.S.  
J. Earth Science.

C I 480K: Pre-Student Teaching Experience III: Music  
(Cross-listed with MUSIC). Cr. 1. Repeatable, maximum of 2 times. F.S.  
Prereq: Admission to teacher education  
Participation in a K-12 school setting. Cross-listed with Music 480K. Permission of Music coordinator required prior to enrollment. Clinical Experience Level 2. Offered on a satisfactory-fail basis only.

C I 480S: Pre-Student Teaching Experience III: English as a Second Language (ESL)  
(0-4) Cr. 2. Repeatable, maximum of 2 times.  
Prereq: C I 280S, ENGL/LING 219; ENGL/LING 220; ENGL/LING 511; admission to teaching education.  
Supervised participation in a school setting. Permission of ESL area coordinator required prior to enrollment. 1/2 day of time needed. Clinical experience level 3. Offered on a satisfactory-fail basis only.

C I 481: Philosophy of Education  
(Dual-listed with H P C 581). (3-0) Cr. 3. Alt. F., offered odd-numbered years.  
Introduction to Western philosophy of education. Emphasis is placed on enduring debates about the purposes(s) of education in a just society. Readings include classic and contemporary texts.
C I 486: Methods in Elementary School World Language Instruction
(Cross-listed with LING, WLC). (3-0) Cr. 3. F.
Prereq: 25 credits in a world language
Planning, implementation, and assessment of standards-based, student-centered, and thematic instruction in the elementary (K-8) classroom. Special emphasis on K-8 students’ communicative skills, cultural knowledge, and content learning.

C I 487: Methods in Secondary School World Language Instruction
(Cross-listed with LING, WLC). (3-0) Cr. 3. F.
Prereq: 25 credits in a world language, admission to the teacher education program, OPI
Theories and principles of contemporary world language learning and teaching. Special emphasis on designing instruction and assessments for active learning.

C I 488: Supervised Tutoring in Reading
(Dual-listed with C I 588). (2-2) Cr. 3. F.S.SS.
Prereq: concurrent enrollment in or completion of one course in corrective reading; diagnosis and correction of reading problems; graduate status required for C I 588
Using formal and informal diagnostic procedures to plan and implement individualized reading instruction. Field experience in tutoring and a related research project.

C I 490: Independent Study
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490A: Independent Study: Education
(Cross-listed with MUSIC). Cr. arr. Repeatable. F.S.SS.
Prereq: Permission of instructor; 12 credits in music, approval of department head

C I 490C: Independent Study: Curriculum Construction
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490D: Independent Study: Principles of Education
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490E: Independent Study: Methods of Teaching
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490F: Independent Study: Educational Psychology
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490G: Independent Study: Digital Learning
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490H: Independent Study: Honors
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490J: Independent Study: Multicultural Education
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490K: Independent Study: History/Social Sciences
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490L: Independent Study: Literacy Education
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490M: Independent Study: Mathematics Education
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490N: Independent Study: World Language
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 490O: Independent Study: Foundations of Education
Cr. 1-3. F.S.SS.
Prereq: GPA of 2.5 or more for preceding semester

C I 494: Practice and Theory of Teaching Literature in the Secondary Schools
(Cross-listed with ENGL). (3-0) Cr. 3. F.S.
Prereq: ENGL 310, ENGL 397, 9 other credits in English beyond ENGL 250, PSYCH 333, admission to teacher education program

C I 495B: Independent Study: Teaching Speech
(Cross-listed with SP CM). (3-0) Cr. 3. F.
Prereq: C I 301; 9 credits in speech communication; minimum GPA of 2.5 in speech communication courses
Problems, methods, and materials related to teaching speech, theatre, and media in secondary schools.

C I 497: Teaching Secondary School Mathematics
(Cross-listed with MATH). (3-0) Cr. 3. F.
Prereq: 15 credits in college mathematics and admission to a teacher licensure program, concurrent enrollment in C I 426 or C I 526; C I 480C

C I 498: Methods of Teaching History/Social Sciences
(Cross-listed with HIST). (3-0) Cr. 3. F.S.
Prereq: Concurrent enrollment in HIST 480A; Admission to teacher education and 30 credits in subject-matter field
Concurrent enrollment in 480A; Admission to teacher education and 30 credits in subject-matter field. Theories and processes of teaching and learning secondary history/social sciences. Emphasis on development and enactment of current methods, assessments, and curriculum materials for providing appropriate learning experiences.

Courses primarily for graduate students, open to qualified undergraduates:
C I 501: Foundations of Digital Learning  
(3-0) Cr. 3. F.SS.  
**Prereq: Graduate classification**  
Educational philosophies and theories of instructional technology. Application of research to the production and use of instructional technology for learning and teaching. Equipment operation.

C I 503: Designing Effective Learning Environments  
(3-0) Cr. 3. F.  
**Prereq: 501**  
Introduction to theories and models of instructional design. Design decision-making based on the analysis of performance problems and instructional inputs. Practical experience with the design and development of instruction and evaluation principles.

C I 504: Evaluating Digital Learning Environments  
(3-0) Cr. 3. F.S.S.  
**Prereq: C I 501**  
Principles and procedures to plan, design, and conduct effective evaluation studies (formative, summative, usability) in different settings are studied. Opportunities to engage in real or simulated evaluation projects of substantial scope are provided. Create evaluation instruments, develop methods with which to evaluate a product or program, conduct try-outs or usability sessions, analyze the data, report the findings, and recommendations are some of the course activities.

C I 505: Using Technology in Learning and Teaching  
(3-0) Cr. 3. F.S.S.  
**Prereq: Graduate classification**  

C I 506: Multicultural Foundations of School and Society: Advanced  
(3-0) Cr. 3. F.  
**Prereq: 6 graduate credits in education**  
Theories, legal bases, and principles of multicultural education. Pluralism and contributing cultures in the United States; presence and contributions of cultural group diversity with implications for educational programs, curriculum development, classroom instruction, materials utilization and development; problems and issues regarding ethnocentrism, prejudice, and discrimination based on race, ethnicity, socioeconomic class, sex/gender, sexual identity, and language in the school environment; curriculum infusion and transformation, multicultural interaction, design and execution of teaching strategies and techniques; inquiry and research on multicultural education issues.

C I 507: Principles and Practices of Distance Learning  
(Dual-listed with C I 407). (2-2) Cr. 3. F.S.S.  
**Prereq: C I 201 or C I 202; convenient access to the Web**  
Review of flexible and distance learning (FDL) cases in a variety of contexts and pedagogic styles, identification of underlying principles and frameworks for best practice in this field.

C I 508: Algebra in the K-12 Classrooms  
(3-0) Cr. 3. F.  
**Prereq: C I 448 or C I 497**  
Focus on Algebraic concept explorations and associated procedures. Use of research-based strategies and appropriate technologies to apply fundamental ideas of patterning, coordinate graphing, and relationships among variables into K-12 classrooms. Additional topics facilitate critical examination of K-12 curriculum, pedagogy, and assessment.

C I 509: Geometry in the K-12 Classrooms  
(3-0) Cr. 3. S.  
**Prereq: C I 448 or C I 497**  
Euclidean and non-Euclidean geometry explorations with a focus on pedagogical issues in the K-12 classroom. Use of research-based strategies and appropriate technologies to teach geometry in K-12 classrooms. Additional topics from discrete mathematics, history and philosophy of geometry and fractal geometries.

C I 511: Technology Diffusion, Leadership and Change  
(3-0) Cr. 3. S.  
**Prereq: Admission to graduate study, C I 501 or equivalent and C I 505 or equivalent**  
Principles and practices of technology diffusion, leadership and school change. Readings and coursework focus on technology diffusion in a broad sense, and examine more closely how this has played out in educational contexts. Leadership is addressed relative to frameworks and strategies for professional development and organizational change.

C I 512: Research Trends in Digital Learning  
(3-0) Cr. 3. F.  
**Prereq: Admission to graduate study and at least two courses in research and foundations of instructional technology**  
Critical review of current research trends in educational technology. Designed to consolidate graduate students’ knowledge of current trends, issues in research, and methods of conducting research in practice.

C I 513: Mathematical Problem Solving in K-12 Classrooms  
(3-0) Cr. 3. F.  
**Prereq: 6 credits of mathematics, C I 448 or C I 497 or C I 597 or permission of instructor**  
Strategies for improving problem solving skills across all strands of mathematics (e.g., geometry, algebra, number theory) will be emphasized. Issues surrounding the appropriate role of problem solving in K-12 mathematics classrooms will also be discussed, including distinctions among teaching “about,” “for,” and “through” problem solving. Note: This course is open to undergraduate students, but it is a graduate level course.

C I 514: Introduction to the Purposes and Complexities of Science Teaching  
(1-2) Cr. 2. SS.  
**Prereq: Admission to M.A.T. program**  
Introduction to critical issues facing science education, science education goals reflecting contemporary purposes of schooling, and how people learn science.

C I 515: Action Research in Education  
(3-0) Cr. 3. S.  
**Prereq: Admission to graduate study, one course in research methods, educational inquiry, statistics, educational psychology, or instructional design**  
Philosophy and methods of conducting and communicating action research focused on improving educational practices. Designed specifically for practicing teachers.

C I 516: Antiracist Curriculum Development and Implementation  
(2-2) Cr. 3. Alt. S., offered odd-numbered years.  
**Prereq: 9 credits in education**  
Introduction to historical, sociological, philosophical and pedagogical foundations of antiracist/multicultural education. Examination of causes of racism, other forms of discrimination, and intergroup conflict from different theoretical perspectives and experiential exercises.
C I 517: Student Teaching
(Dual-listed with C I 417). Cr. arr. F.S.
Prereq: Full admission to teacher education or licensed teacher; approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching.

C I 517A: Student Teaching: Social Studies-Middle School
(Dual-listed with C I 417A). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 517B: Student Teaching: Physical Sciences
(Dual-listed with C I 417B). Cr. arr. F.S.
Prereq: Full admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in physical sciences grades 5-12.

C I 517C: Student Teaching: Mathematics
(Dual-listed with C I 417C). Cr. arr. F.S.
Prereq: Full admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in mathematics grades 5-12.

C I 517D: Student Teaching: Biological Sciences
(Dual-listed with C I 417D). Cr. arr. F.S.
Prereq: Full admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in biological sciences grades 5-12.

C I 517G: Student Teaching: World Language
(Dual-listed with C I 417G). (Cross-listed with WLC). Cr. arr. F.S.
Prereq: Admission to teacher education or licensed teacher, approval of coordinator during semester before student teaching.
Evaluation of instruction, lesson planning, and teaching in world languages and cultures.

C I 517J: Student Teaching: Earth Sciences
(Dual-listed with C I 417J). Cr. arr. F.S.
Prereq: Full admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in earth sciences grades 5-12.

C I 517M: Student Teaching: Science - Basic
(Dual-listed with C I 417M). Cr. arr. F.S.
Prereq: Full admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in basic sciences grades 5-12.

C I 517N: Student Teaching: International
(Dual-listed with C I 417N). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 517P: Student Teaching: Social Studies-High School
(Dual-listed with C I 417P). Cr. arr. F.S.
Prereq: GPA 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 517R: Student Teaching: Music-Elementary
(Dual-listed with C I 417R). (Cross-listed with MUSIC). Cr. arr. F.S.
Prereq: Minimum GPA of 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 517S: Student Teaching: Music-Secondary
(Dual-listed with C I 417S). (Cross-listed with MUSIC). Cr. arr. F.S.
Prereq: Minimum GPA of 2.5; Admission to teacher education, approval of coordinator during semester before student teaching
Evaluation of instruction, lesson planning, and teaching in the liberal arts and sciences.

C I 518: Science Methods I: A Research-Based Framework for Teaching Science
(Dual-listed with C I 418). (3-0) Cr. 3. F.
Prereq: C I 514; concurrent enrollment in C I 547 and C I 591D
Development of a research-based framework for teaching science that includes student goals, congruent student actions, the character and role of science inquiry, teaching behaviors and strategies, contemporary learning theories, and self-evaluation.

C I 519: Secondary Science Methods II: Advancing a Research-Based Framework for Teaching Science
(Dual-listed with C I 419). (3-0) Cr. 3. S.
Prereq: C I 418 or C I 518, concurrent enrollment in C I 591D
Advancing a research-based framework for teaching science in a variety of school settings; emphasizing the teacher’s role, the development and revision of science curriculum, exceptional learners, content area reading strategies, management strategies, technology, and student assessment.

C I 520: Bilingualism, Bilingual Education, and U.S. Mexican Youth
(Dual-listed with C I 420). (3-0) Cr. 3. F.
Prereq: C I 406
Introduction to research on bilingualism and examination of the social, historical, and political contexts of bilingual education in U.S. schools. Attention to policy environment, school program structure, mode of classroom instruction, family and community context, and attainment of bilingualism and biculturalism for U.S. Mexican youth.

C I 523: Teaching Mathematics to Struggling Elementary Learners
(3-0) Cr. 3. SS
Prereq: C I 438 or C I 448
Instructional methods and assessment techniques for elementary students struggling to learn mathematics. Emphasis on current research and practices for at-risk students and students with disabilities.

C I 526: Principles of Secondary Education
(Dual-listed with C I 426). (3-0) Cr. 3. F.S.SS.
Prereq: C I 202, senior classification, admission to teacher education program
The curriculum, human relations, student evaluation, support services, classroom management, organization of schools, legal aspects of schools, professionalism, and career planning.
C I 529: Educational Psychology and the Secondary Classroom
(3-0) Cr. 3. SS.
Prereq: Bachelor’s degree, admission into a graduate level teacher licensure program
Analysis of psychological research theory related to learning, cognition, motivation, individual differences, and teaching techniques. Student and classroom assessment to facilitate positive learning outcomes. Adaption and differentiation of instruction to meet individual learners’ needs. This course can only be used for teacher licensure programs. It is not acceptable for use in meeting the non-licensure M.Ed., M.S. or Ph.D. requirements.

C I 533: Educational Psychology of Learning, Cognition, and Memory
(Cross-listed with PSYCH). (3-0) Cr. 3. F.
Learning, cognition, and memory in educational/ training settings.

C I 541: How People Learn: Implications for Teaching Science
(3-0) Cr. 3.
Prereq: Bachelor’s degree
Current learning theories within science education and their application to science classrooms. Examination of models which assist the implementation of these theories of learning.

C I 546: Advanced Pedagogy in Science Education
(3-0) Cr. 3. SS.
Prereq: Bachelor’s degree

C I 547: Nature of Science
(Dual-listed with C I 347). (3-0) Cr. 3. F.
Prereq: C I 280M; concurrent enrollment in C I 418 or instructor permission
The intersection of issues in the history, philosophy sociology, and psychology of science and their application to and impact on science teaching and learning, science teacher education, and science education research.

C I 548: Restructuring Science Activities
(3-0) Cr. 3. SS.
Prereq: Admission to teacher education or teaching license
Modification of laboratory activities and other everyday science activities so they are more congruent with how students learn, the nature of science, and the National Science Education Standards.

C I 550: Ethnicity and Learning
(Dual-listed with C I 450). (3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: C I 332 or C I 333, C I 406

C I 551: Foundations of Reading and Language Arts
(3-0) Cr. 3. Alt. F., offered odd-numbered years.
Prereq: Teaching license
Analyzing, discussing, and researching the theory and practice of current literacy issues.

C I 552: Assessment for Literacy and Learning
(Dual-listed with C I 452). (3-0) Cr. 3. F.S.SS.
Prereq: C I 378 or equivalent
Identification, analysis and correction of reading problems in five areas: print knowledge, integration of print knowledge, oral reading fluency, vocabulary, and comprehension.

C I 553: Teaching Struggling Adolescent Readers
(Cross-listed with SP ED). (3-0) Cr. 3. SS.
Prereq: Teaching license
Instructional strategies for enhancing the fluency, vocabulary and comprehension of struggling adolescent readers. Attention to content-area reading materials and strategies.

C I 554: Reading and Responding to Children’s Literature
(3-0) Cr. 3. Alt. F., offered even-numbered years.
Prereq: Senior status or teaching license
Research and discussion of issues surrounding the classroom use of literature for children and young adults including censorship, diversity, selection, and the influences of technology.

C I 555: Literacy, Leadership, and Advocacy
(3-0) Cr. 3. S.
Prereq: Graduate Standing
Examination of the roles of literacy specialists/coaches in diverse pre-K-12 schools and communities. Particular focus placed on current theories, research, standards, and policies relative to literacy processes and instruction, including culturally responsive literacy; processes of successful literacy coaching; and methods of supporting teachers and other school personnel in planning, implementing, and evaluating literacy instruction for all students.

C I 556: Integrating Technology into the Reading and Language Arts Curriculum
(Dual-listed with C I 456). (3-0) Cr. 3. F.S.
Prereq: C I 201 or C I 202, C I 377
Methods and strategies used to integrate technology into the reading and language arts curriculum. Use and evaluation of reading and language arts software for elementary classrooms.

C I 558: Perspectives on Reading Comprehension
(3-0) Cr. 3. F.
Prereq: Graduate standing
Critical examination of the topics central to the study of reading comprehension, including processes, development, contexts, motivation, teaching and learning, and assessment. Reading and discussion of research literature in reading comprehension and comprehension instruction.

C I 565: Literacy: Connecting Research, Policy and Practice
(3-0) Cr. 3. Alt. F., offered irregularly. Alt. S., offered irregularly.
Prereq: Graduate standing
Critical examination of current policy initiatives and reform efforts that affect how literacy is viewed, assessed, and practiced, as well as how literacy professionals are prepared for their roles in public schools and colleges.
C I 567: Teaching Mathematics to Struggling Secondary Learners  
(Cross-listed with SP ED). (3-0) Cr. 3.  
Prereq: Secondary teaching experience  
Instructional methods and assessment techniques for secondary students struggling to learn mathematics. Particular emphasis on current research, practices, and trends in mathematics interventions for at-risk students and students with disabilities.

C I 568: New Media Literacies: Understanding Research and Practice  
(3-0) Cr. 3. F.  
Prereq: Graduate Standing  
Designed to increase awareness and understanding of critical issues surrounding the evolving concept of literacy and examine the effect that technology has on the literacy we use every day, teach in our schools, and need in order to function as 21st century citizens.

C I 570: Toying With Technology for Practicing Teachers  
(Cross-listed with M S E). (2-0) Cr. 2. SS.  
Prereq: C I 201 or 202 or 505 or equivalent  
A project-based, hands-on learning course. Technology literacy, appreciation for technological innovations, principles behind many technological innovations, hands-on experiences based upon simple systems constructed out of LEGO's and controlled by small microcomputers. Other technological advances with K-12 applications will be explored. K-12 teachers will leave the course with complete lesson plans for use in their classrooms.

C I 577: Historical Perspectives on Technology Equity: Implications for Policy and Practice  
(3-0) Cr. 3. S.  
Prereq: Graduate Status  
Exploration of the historical, political, sociological, and economic factors that engender global inequities. Examination of the definition and origin of the "digital divide" and its relationship to the histories of racism, sexism, classism, and imperialism/globalization. Exploration and analysis of research-based alternative approaches to alleviating technology inequities in educational settings.

C I 578: Pedagogy, Equality of Opportunity, and the Education of Blacks in the United States  
(3-0) Cr. 3.  
Prereq: Graduate or senior level status or permission of instructor  
This course takes a nonlinear, reflective view of the historical, social, economic, political, and legal contexts of the education of African Americans in the U.S. Educational theories and philosophies, Critical Race Theory and Black Feminist Thought form the framework for investigating broad-based, multiple issues of education for African Americans in the U.S. as they are situated in the prevailing dominant views.

C I 588: Supervised Tutoring in Reading  
(Dual-listed with C I 488). (2-2) Cr. 3. F.S.SS.  
Prereq: concurrent enrollment in or completion of one course in corrective reading; diagnosis and correction of reading problems; graduate status required for C I 588  
Using formal and informal diagnostic procedures to plan and implement individualized reading instruction. Field experience in tutoring and a related research project.

C I 590: Special Topics  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590A: Special Topics: Curriculum  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590B: Special Topics: Digital Learning  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590C: Special Topics: Science Education  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590D: Special Topics: Secondary Education  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590F: Special Topics: Multicultural Education  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590G: Special Topics: Mathematics Education  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590I: Special Topics: Elementary Education  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590J: Special Topics: World Language Education  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590K: Special Topics: Educational Psychology  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590L: Special Topics: Social Studies Education  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 590M: Special Topics: Literacy Education  
Cr. 1-3. F.S.  
Prereq: 9 graduate credits in education

C I 591: Graduate Level Pre-Student Teaching Experience  
(0-2) Cr. 1-4. Repeatable, maximum of 3 times. F.S.  
Prereq: 15 graduate credits in special area; admission to teacher education. Supervised pre-student teaching experience in secondary schools. Supervision level 3.

C I 591C: Supervised Field Experience: Elementary Education  
(0-2) Cr. 1-6. F.S.SS.  
Prereq: 15 graduate credits in special area  
Supervised on-the-job field experience in special area.

C I 591D: Graduate Level Pre-Student Teaching Experience: Secondary Science  
(0-2) Cr. 1-4. Repeatable. F.S.  
Prereq: 15 graduate credits in specialty area; admission to teacher education  
Supervised pre-student teaching experience in secondary science education. Supervision level 3.
C I 591G: Graduate Level Pre-Student Teaching Experience: Secondary Mathematics Education
(0-2) Cr. 1-4. Repeatable. F.S.
Prereq: 15 graduate credits in specialty area; admission to teacher education
Supervised pre-student teaching experience in mathematics education.
Supervision level 3.

C I 591M: Supervised Field Experience: Literacy
(0-2) Cr. 1-6. F.S.SS.
Prereq: 15 graduate credits in special area
Supervised on-the-job field experience in special area.

C I 593: Workshops
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593A: Workshops: Curriculum
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593B: Workshops: Digital Learning
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593C: Workshops: Science Education
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593D: Workshops: Secondary Education
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593F: Workshops: Multicultural Education
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593G: Workshops: Mathematics Education
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593I: Workshops: Elementary Education
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593J: Workshops: World Language Education
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593K: Workshops: Educational Psychology
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593L: Workshops: Social Studies Education
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 593M: Workshops: Literacy Education
Cr. 1-3. F.S.
Prereq: 9 graduate credits in education

C I 594: Contemporary Curriculum Theory and Principles
(3-0) Cr. 3. F.
Prereq: Graduate standing
Theoretical and historical perspectives of contemporary curriculum; social, cultural, and epistemological aspects of curriculum theory; diverse philosophical positions and approaches to understanding curriculum as it relates to educational settings.

C I 595: Content Area Reading and Literacy
(Dual-listed with C I 395). (3-0) Cr. 3. F.S.
Prereq: Graduate status and teaching license
Analysis and application of strategies to enhance students’ literacy development in middle and secondary school settings. Research paper related to a course topic.

C I 597: Teaching Secondary School Mathematics
(3-0) Cr. 3. F.
Prereq: 15 credits in college mathematics; and either in a teacher licensure program or in the process of applying, concurrent enrollment in C I 426 or C I 526

C I 599: Creative Component
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599A: Creative Component: Curriculum
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599B: Creative Component: Digital Learning
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599C: Creative Component: Science Education
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599D: Creative Component: Secondary Education
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599F: Creative Component: Multicultural Education
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599G: Creative Component: Mathematics Education
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599I: Creative Component: Elementary Education
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599J: Creative Component: World Language Education
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education

C I 599K: Creative Component: Educational Psychology
Cr. 1-3. F.S.SS.
Prereq: 9 graduate credits in education
C I 599L: Creative Component: Social Studies Education  
Cr. 1-3. F.S.SS.  
Prereq: 9 graduate credits in education

C I 599M: Creative Component: Literacy Education  
Cr. 1-3. F.S.SS.  
Prereq: 9 graduate credits in education

Courses for graduate students:

C I 601: Foundations of Educational Inquiry  
(3-0) Cr. 3. F.  
Prereq: Admission to a doctoral program  
First of a two-course sequence designed to welcome new Curriculum and Instruction PhD students into the community of educational scholars. Inquiry into (1) the history of education as an academic field of study; (2) the philosophical underpinnings of social scientific and educational inquiry; and (3) the contemporary landscape of the field of education.

C I 602: Educational Inquiry in Action  
(3-0) Cr. 3. S.  
Prereq: C I 601  
Second course in a sequence welcoming Curriculum and Instruction Ph.D. students into the community of educational scholars. Opportunities to learn about a variety of faculty research in the department, engage faculty in conversation about their research, and continue reflecting on the theory and practice of educational inquiry. Offered on a satisfactory-fail basis only.

C I 603: Advanced Learning Environments Design  
(Cross-listed with HCI). (3-0) Cr. 3. S.  
Prereq: C I 503  
Exploration of advanced aspects of the instructional design process. Application of analysis, design, development and production, evaluation, implementation, and project management principles. Focus on the production and use of instructional technology with an emphasis on the instructional design consulting process. Theory and research in instructional technology provides the foundation for design decisions.

C I 610: Digital Learning in Teacher Education  
(2-0) Cr. 2. F.  
Prereq: C I 505  
Research on using technology in teacher education programs. Application examples studied. Field component involving relating material from class to a teacher education situation.

C I 611: Philosophical Foundations of Digital Learning  
(3-0) Cr. 3.  
Prereq: 12 graduate credits in curriculum and instruction  
Exploration of philosophies of science that serve as foundations for research and practice in instructional technology, including positivism, post-positivism, interpretivism/constructivism, and critical theory. The roles of language, nature of truth and reality, and acceptable ways of knowing are explored in terms of their implications for instructional technology design, delivery, research, and scholarship.

C I 612: Socio-psychological Foundations of Digital Learning  
(3-0) Cr. 3.  
Prereq: 12 graduate credits in curriculum and instruction  
Exploration of theories of learning and associated instructional models that are the foundation for research and practice in education and educational technology, including behaviorism, information processing theory, and cognitive science. Emphasis on cognitive and social constructivist paradigms and the creation and use of constructivist learning environments supported by technology.

C I 615: Seminar  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615A: Seminar: Curriculum  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615B: Seminar: Digital Learning  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615C: Seminar: Science Education  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615D: Seminar: Secondary Education  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615F: Seminar: Multicultural Education  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615G: Seminar: Mathematics Education  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615H: Seminar: Elementary Education  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615J: Seminar: World Language Education  
(0-2) Cr. 1. F.S.  
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.
C I 615K: Seminar: Educational Psychology
(0-2) Cr. 1. F.S.
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615L: Seminar: Social Studies Education
(0-2) Cr. 1. F.S.
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 615M: Seminar: Literacy Education
(0-2) Cr. 1. F.S.
Selected topics in curriculum and instruction; an analysis of research potential; evaluation of impact upon the profession; implications for additional research.

C I 690: Advanced Special Topics
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690A: Advanced Special Topics: Curriculum
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690B: Advanced Special Topics: Digital Learning
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690C: Advanced Special Topics: Science Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690D: Advanced Special Topics: Secondary Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690F: Advanced Special Topics: Multicultural Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690G: Advanced Special Topics: Mathematics Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690I: Advanced Special Topics: Elementary Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690J: Advanced Special Topics: World Language Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690K: Advanced Special Topics: Educational Psychology
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690L: Advanced Special Topics: Social Studies Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 690M: Advanced Special Topics: Literacy Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699: Research
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699A: Research: Curriculum
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699B: Research: Digital Learning
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699C: Research: Science Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699D: Research: Secondary Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699F: Research: Multicultural Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699G: Research: Mathematics Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699I: Research: Elementary Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699J: Research: World Language Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699K: Research: Educational Psychology
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699L: Research: Social Studies Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education

C I 699M: Research: Literacy Education
Cr. arr. Repeatable.
Prereq: 9 graduate credits in education