

# CURRICULUM AND INSTRUCTION (C I)

---

**Courses primarily for undergraduates:**

## **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 web 2.0 tools, apps, 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: Secondary**

(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 at the secondary level in public schools. For prospective teachers in an ISU Secondary Education teacher preparation program; open to students who are considering teaching and/or work in education as a career path. Students in Early Childhood and Elementary Education programs should take C I 205.

## **C I 205: Social Foundations of Education in the United States: Early Childhood and Elementary Education**

Cr. 3. F.S.

Introduction to the historical and contemporary landscape of schooling in the United States. Emphasis 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.

## **C I 208: Early Childhood Education Teacher 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: All first semester freshman Elementary Education majors are automatically enrolled.*

Learning Community for Elementary Education majors to help with their transition to university life. Offers an overview of K-8 teacher certification in Iowa as well as degree and career planning. With the help of guest speakers and peer mentors, students learn about elementary teaching as a profession and are introduced to a social justice orientation to teaching. 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**

(3-0) Cr. 3. F.S.

*Prereq: C I 205; sophomore classification.*

Introduction to instructional planning, curriculum organization, instructional strategies, and classroom management that provide equitable learning opportunities for all students, as well as teaching in culturally affirming ways. Open to students majoring in Elementary Education or Early Childhood Education.

## **C I 280: Pre-Student Teaching Experience I**

(1-8) Cr. 0.5-2. Repeatable. F.S.

*Prereq: Prereq: C I 201 or C I 202. Permission of instructor needed for 2 credits*

Pre-Student teaching experience in learning technologies in various educational settings with K-12 technology leaders. 2 1/2-hour blocks of time needed. Clinical Experience Level 1. Offered on a satisfactory-fail basis only.

**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 needed for 2 credits.*

Pre-Student teaching experience in learning technologies in various educational settings with K-12 technology leaders. 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 280I: 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 and SP ED 334.*

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 280J: Pre-Student Teaching Experience I: Mathematics Clinic**

Cr. 1. Repeatable. S.

Early field experience where students explore and develop an understanding of research-based instructional practices that could be implemented with middle level students to teach mathematical concepts. 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.

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.

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.

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 302: Principles and Practices of Learning with Technology**

(2-2) Cr. 3. F.S.

*Prereq: C I 201 or C I 202*

Advanced integration of learning technologies into K-12 educational contexts. Examine current trends in using learning technologies with K-12 students; explore current applications used in formal and informal educational settings; and discuss issues focused on technology use in education. Required for Learning Technologies minor.

**C I 315: Transfer Orientation**

Cr. 1. F.S.

Offers an overview of Elementary Education requirements, university procedures, K-8 certification in Iowa as well as degree and career planning. With the help of guest speakers and peer mentors, students learn about elementary teaching as a profession and are introduced to a social justice orientation to teaching. Learning community required of all transfer students and change of major students pursuing Elementary Education. Offered on a satisfactory-fail basis only.

**C I 332: Educational Psychology of Young Learners**

(3-0) Cr. 3. F.S.

*Prereq: PSYCH 230 or HD FS 102, open only to majors in Early Childhood Education or Elementary Education*

Psychological theory relevant to classroom learning, cognition, motivation, classroom management and assessment for children from kindergarten to grade 8. Implications of theory for teaching children and for assessing learning in educational settings with primary and intermediate grade children.

**C I 333: Educational Psychology**

(Cross-listed with PSYCH). (3-0) Cr. 3. F.S.

*Prereq: PSYCH 230 or HD FS 102, application to the teacher education program or major in psychology*

Classroom learning with emphasis on theories of learning and cognition, and instructional techniques. Major emphasis on measurement theory and the classroom assessment of learning outcomes.

**C I 347: Nature of Science**

(Dual-listed with C I 547). (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 377: The Teaching of Reading and Language Arts in the Primary Grades (K-3)**

(4-0) Cr. 4. F.S.SS.

*Prereq: Admission to teacher education program, C I 245, SP ED 250, HD FS 240 (ECE majors); concurrent enrollment in C I 405, C I 448, C I 468A, and C I 468C (El Ed majors) or C I 438, C I 468F, C I 468G, SP ED 368.*

Theories, teaching strategies, and instructional materials pertinent to teaching reading, writing, listening, and speaking to children in kindergarten through third grade.

**C I 378: The Teaching of Reading and Language Arts in the Intermediate Grades (4-6)**

(4-0) Cr. 4. F.S.SS.

*Prereq: C I 377; concurrent enrollment in C I 449, C I 468B, C I 468D, and C I 443*

Theories and processes of literacy. Application through reading and writing across the curriculum, integration of language arts, literature-based instruction, and metacognitive strategies.

**C I 395: Teaching Disciplinary Literacy**

(Dual-listed with C I 595). (3-0) Cr. 3. F.S.

*Prereq: C I 204 and junior classification.*

Analysis and application of strategies to enhance students' disciplinary literacy development in middle and secondary school setting. Research paper related to a course topic.

**C I 405: Social Justice Education and Teaching: Early Childhood and Elementary**

Cr. 3. F.S.

*Prereq: C I 201, C I 332, junior classification, admission to teacher education program.*

Opportunity to expand understanding of issues related to educational and social justice at the levels of Self, Systems, and Teaching. Personal growth and awareness; education within a broader social and historical context; equity and justice-oriented teaching. Special attention is given to enacting culturally relevant teaching in grades PK through 6, along with curriculum transformation and social action in those grades. Restricted to those enrolled in Early Childhood and Elementary Education Programs. Elementary education majors should take CI405 with Block 1 practicum. Meets U. S. Diversity Requirement.

**C I 406: Social Justice Education and Teaching: Secondary**

(3-0) Cr. 3. F.S.SS.

*Prereq: C I 201 or C I 202, C I 332 or C I 333, junior classification, admission to teacher preparation program. Restricted to those enrolled in Secondary and K-12 Education Programs.*

Awareness and nature of social justice in relation to the educational system; need for cultural competence; multicultural concepts and theories; awareness of context of cultural groups - their history, perspective, needs, and contributions; problems and issues regarding prejudice, and discrimination based on race, ethnicity, socioeconomic class, gender, sexual identity and language in the school environment. Special attention to culturally relevant teaching in grades 7 through 12, along with curriculum transformation and social action in those grades. Meets U.S. Diversity Requirement

**C I 407: Principles and Practices of Distance Learning**

(Dual-listed with C I 507). (2-2) Cr. 3. F.SS.

*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. Required for the Learning Technologies minor.

**C I 416: Supervised Student Teaching - Elementary**

Cr. arr. Repeatable. F.S.

*Prereq: GPA 2.5; full admission to teacher education; senior classification; C I 378, C I 443, C I 448, C I 449; reservation required*

Supervised teaching experience in the elementary grades.

**C I 416A: Supervised Student Teaching - Elementary: Primary grades (K-3)**

Cr. arr. Repeatable. F.S.

*Prereq: GPA 2.5; full admission to teacher education; senior classification; C I 378, C I 443, C I 448, C I 449; reservation required*

Supervised teaching experience in the elementary grades.

**C I 416B: Supervised Student Teaching - Elementary: Intermediate grades (4-6)**

Cr. arr. Repeatable. F.S.

*Prereq: GPA 2.5; full admission to teacher education; senior classification; C I 378, C I 443, C I 448, C I 449; reservation required*

Supervised teaching experience in the elementary grades.

**C I 416C: Supervised Student Teaching - Elementary: World Language**

Cr. arr. Repeatable. F.S.

*Prereq: GPA 2.5; full admission to teacher education; senior classification; C I 378, C I 443, C I 448, C I 449; reservation required*

Supervised teaching experience in the elementary grades.

**C I 416D: Supervised Student Teaching - Elementary: International Student Teaching - Primary Grades**

Cr. arr. Repeatable. F.S.

*Prereq: GPA 2.5; full admission to teacher education; senior classification; C I 378, C I 443, C I 448, C I 449; reservation required*

Supervised teaching experience in the elementary grades.

**C I 416E: Supervised Student Teaching - Elementary: International Student Teaching - Intermediate Grades**

Cr. arr. Repeatable. F.S.

*Prereq: GPA 2.5; full admission to teacher education; senior classification; C I 378, C I 443, C I 448, C I 449; reservation required*

Supervised teaching experience in the elementary grades.

**C I 416Z: Supervised Student Teaching - Elementary: English as a Second Language**

Cr. arr. Repeatable. F.S.

*Prereq: GPA 2.5; full admission to teacher education; senior classification; ENGL 219; ENGL 220; ENGL 425; C I 280S; C I 480S; C I 378.*

Supervised teaching experience in the elementary grades.

**C I 417: Student Teaching**

(Dual-listed with C I 517). Cr. arr. Repeatable. 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 417A: Student Teaching: Social Studies-Middle School**

(Dual-listed with C I 517A). Cr. arr. Repeatable. 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 C I 517B). Cr. arr. Repeatable. 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 C I 517C). Cr. arr. Repeatable. 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 417D: Student Teaching: Biological Sciences**

(Dual-listed with C I 517D). Cr. arr. Repeatable. 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 417E: Student Teaching: English and Literature**

(Cross-listed with ENGL). Cr. arr. Repeatable. 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 C I 517G). (Cross-listed with WLC). Cr. arr. Repeatable. 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, secondary grades.

**C I 417J: Student Teaching: Earth Sciences**

(Dual-listed with C I 517J). Cr. arr. Repeatable. 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 417M: Student Teaching: Science - Basic**

(Dual-listed with C I 517M). Cr. arr. Repeatable. 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 417N: Student Teaching: International**

(Dual-listed with C I 517N). Cr. arr. Repeatable. 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. Repeatable. 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. Repeatable. 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 280M 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, content area reading strategies, science safety and classroom management, issues in using technology, and student assessment.

**C I 420: Bilingualism, Bilingual Education, and U.S. Mexican Youth**

(Dual-listed with C I 520). (Cross-listed with US LS). (3-0) Cr. 3. F.

*Prereq: C I 405 or 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: Senior classification and admission to teacher education program*

Introduction to secondary education teaching strategies, lesson planning that provides equitable learning opportunities for all students, classroom management, legal aspects of schools, professional and ethical issues, current educational issues, professional learning communities, and social-justice oriented teaching.

**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, and C I 468I*

Emphasis is placed on providing equity and justice-oriented 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: MATH 195 (minimum grade of C-), MATH 196 (minimum grade of C-); concurrent enrollment in C I 377, C I 468F, C I 468G and Sp Ed 368*

Develop an understanding of effective mathematics teaching practices situated in equitable pedagogies that support primary students' mathematical understanding.

**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*

Development and application of current methods in the teaching and learning of primary science. Emphasis is on research-based teaching practices, developmental implications, and providing appropriate science learning experiences in the early elementary grades.

**C I 443: The Teaching of Social Studies**

(3-0) Cr. 3. F.S.SS.

*Prereq: C I 377, concurrent enrollment in C I 378, C I 449, C I 468B and C I 468D (El Ed majors)*

Emphasis is placed on providing equity and justice-oriented 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, and C I 405 (El Ed majors) or C I 377, C I 468F, C I 468G and Sp Ed 368 (ECE majors)*

Develop an understanding of effective mathematics teaching practices situated in equitable pedagogies that support elementary students' mathematical understanding.

**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 and C I 443*

Development and application of current methods in the teaching and learning of elementary science. Emphasis is on research-based teaching practices, developmental implications, and providing appropriate science learning experiences in the elementary grades.

**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*

Examination of cultural relevance in education. Development and application of strategies and techniques for implementing multicultural goals and multiethnic perspectives in PreK-12 school classroom settings. Meets U.S. Diversity Requirement

**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 current technology being used in education and topics being addressed. These modules extend learning opportunities from other courses and experiences. Required for the Learning Technologies minor.

**C I 456: Integrating Technology into Literacy**

(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 K-8 literacy. Examination of the use and evaluation of technology appropriate for elementary literacy 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 468I: 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 grade 5-12 science classroom while engaged in other elementary methods courses. Clinical Supervision 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 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**

(Cross-listed with MUSIC). Cr. 0.5-2. Repeatable. 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. F.S.

*Prereq: Admission to teacher education*

Participation in a K-12 school setting. 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**

(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 490P: Independent Study: Science Education**

Cr. 1-3. F.S.

*Prereq: GPA of 2.5 or more for preceding semester*

Independent Study in science education.

**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*

Portfolio review. Current theories and practices in the teaching of literature to secondary school students. Integrating literary study and writing. Preparation and selection of materials. Classroom presentation. Unit planning. (Taken concurrently with C I 280, Cr. 2, and Sp Ed 450).

**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. If in a teacher licensure program, concurrent enrollment in C I 426 or C I 526.*

Develop an understanding of instructional planning, lesson implementation, and assessment in grades 5-12 mathematics, with a focus on reform-based mathematics, equity, and conceptual understanding.

**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 Learning Technologies**

(3-0) Cr. 3. F.SS.

*Prereq: Graduate classification*

Educational philosophies and theories of teaching, learning, and learning technologies. Application of research to the production and use of learning technologies in various educational contexts. 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**

(Cross-listed with HCI). (3-0) Cr. 3. 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.SS.

*Prereq: Graduate classification*

Teaching and learning using computers. Selection and evaluation of digital tools for teaching and learning. Research on instructional technology. Tool software. Trends in computer-based instruction.

**C I 506: Social Justice Education and Teaching: Advanced**

(3-0) Cr. 3. F.

*Prereq: 6 graduate credits in education*

Engage with justice-oriented multicultural frameworks for transformative education and education research, understand equity in education issues in historical and contemporary contexts, develop principled approaches to critical self-reflection, interpret educational situations in justice-oriented ways, and counter inequities in education through curriculum, pedagogy, and research.

**C I 507: Principles and Practices of Distance Learning**

(Dual-listed with C I 407). (2-2) Cr. 3. F.SS.

*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. Required for the Learning Technologies minor.

**C I 508: Algebra in the K-12 Classrooms**

(3-0) Cr. 3. S.

*Prereq: 6 credits of mathematics; credit or concurrent enrollment in C I 448 or C I 497 or C I 597*

Focus on Algebraic reasoning, concepts, and associated procedures in K-12 classrooms. Learning trajectories in algebra, examination of representation, and analysis of mathematical situations are discussed. Attention is given to algebraic habits of mind, generalization, functions, and the transition from arithmetic to algebra.

**C I 509: Geometry in the K-12 Classrooms**

(3-0) Cr. 3. F.

*Prereq: 6 credits of mathematics; credit or concurrent enrollment in C I 448 or C I 497 or C I 597*

Explore the fundamental mathematical theory underlying the content area of geometry and measurement through research-based pedagogies in K-12 classrooms. An investigative approach involving problem solving, reasoning and proof, connections, and communication are emphasized.

**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; credit or concurrent enrollment in C I 448 or C I 497 or C I 597*

Develop problem solving strategies across all strands of mathematics (e.g., geometry, algebra, number theory). Issues surrounding the appropriate role of problem solving in K-12 mathematics classrooms are discussed, including distinctions among teaching "about," "for," and "through" problem solving.

**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. Repeatable. 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. Repeatable. 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. Repeatable. 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. Repeatable. 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. Repeatable. 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. Repeatable. 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, secondary grades.

**C I 517J: Student Teaching: Earth Sciences**

(Dual-listed with C I 417J). Cr. arr. Repeatable. 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. Repeatable. 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. Repeatable. 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. Repeatable. 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, 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, content area reading strategies, science safety and classroom management, issues in using 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 405 or 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 Students who Struggle in Mathematics**

(3-0) Cr. 3. S.

*Prereq: C I 438 or C I 448*

Explore and develop an understanding of research-based instructional practices that could be implemented with elementary students who are struggling with learning mathematical concepts.

**C I 526: Principles of Secondary Education**

(Dual-listed with C I 426). (3-0) Cr. 3. F.S.SS.

*Prereq: Senior classification and admission to teacher education program*

Introduction to secondary education teaching strategies, lesson planning that provides equitable learning opportunities for all students, classroom management, legal aspects of schools, professional and ethical issues, current educational issues, professional learning communities, and social-justice oriented teaching.

**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 and Mathematics**

(3-0) Cr. 3.

*Prereq: Bachelor's degree*

Current theories of learning and motivation in science and mathematics education and their application to classrooms. Examination of teaching models congruent with learning theory and current research in science and mathematics education.

**C I 546: Advanced Pedagogy in Science Education**

(3-0) Cr. 3. S.SS.

*Prereq: Bachelor's degree*

Advanced examination of pedagogy, emphasizing teacher behaviors and strategies, methods of self-assessment, action research, and current issues and trends in science education.

**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 national 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*

Examination of cultural relevance in education. Development and application of strategies and techniques for implementing multicultural goals and multiethnic perspectives in PreK-12 school classroom settings. Meets U.S. Diversity Requirement

**C I 551: Foundations of Reading and Language Arts**

(3-0) Cr. 3. Alt. F., offered irregularly.

*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 Adolescent Readers with Reading Difficulties**

(Cross-listed with SP ED). (3-0) Cr. 3. SS.

*Prereq: Teaching license or senior status*

Instructional strategies for enhancing the fluency, vocabulary and comprehension of adolescents with reading difficulties. Attention to content-area reading materials and strategies.

**C I 554: Reading and Responding to Children's Literature**

(3-0) Cr. 3. F.

*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 Literacy**

(Dual-listed with C I 456). (3-0) Cr. 3. F.S.S.

*Prereq: C I 201 or C I 202, C I 377*

Methods and strategies used to integrate technology into K-8 literacy. Examination of the use and evaluation of technology appropriate for elementary literacy 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. F.S.

*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 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 in Education for Social Justice**

Cr. 1-3. Repeatable. F.S.

Topics vary each time offered.

**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: Teaching Disciplinary Literacy**

(Dual-listed with C I 395). (3-0) Cr. 3. F.S.

*Prereq: C I 204 and junior classification.*

Analysis and application of strategies to enhance students' disciplinary literacy development in middle and secondary school setting. 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*

Develop an understanding of instructional planning, lesson implementation, and assessment in grades 5-12 mathematics, with a focus on reform-based mathematics, equity, and conceptual understanding.

**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.*

Required course for all School of Education PhD students that introduces students into the community of educational scholars with a focus on: 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 methodological landscape of the field of education.

**C I 602: Educational Inquiry in Action**

(3-0) Cr. 3. S.

*Prereq: C I 601*

Opportunities to learn about a variety of faculty research in the School of Education, 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 615I: 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 in Education for Social Justice**

Cr. arr. Repeatable.

*Prereq: 9 graduate credits in education*

Topics vary each time offered.

**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*