

Curriculum and Instruction

Missions and Goals

The Department of Curriculum and Instruction aspires to prepare transformative leaders in teaching, learning, and curriculum within diverse pre-K-16 settings through exemplary teaching, research and outreach. In order to reach this vision, we have the following mission. As an engaged community of scholars and teacher educators, we seek to:

- Enhance Iowa's families, schools, and communities through exemplary education and teacher preparation;
- Provide educators and students with the knowledge, skills, and experience necessary to become transformative leaders in an increasingly changing and interdependent world; and
- Support the advancement of specialized academic disciplines through exemplary research and scholarship.

Undergraduate Study

The Department of Curriculum and Instruction provides the professional education coursework that leads to licensure of pre-service teachers. Majors offered in the department include Elementary Education (K-6), and Early Childhood Education-Unified (birth through age 8). The Early Childhood Education-Unified major is an interdepartmental program administered by the Departments of Curriculum and Instruction and Human Development and Family Studies.

Students who are interested in teaching at the secondary level (7-12) major in a specific discipline (e.g. Mathematics, Science, English, Social Studies) and complete the additional coursework in Curriculum and Instruction required for a teaching license.

Editor's Note: The Iowa Board of Educational Examiners has mandated changes to the teacher licensure requirements which will impact students graduating after September 1, 2015. Students must consult with an education academic adviser to review these curriculum changes.

Elementary Education and Early Childhood Education-Unified majors must complete a professional course sequence:

C I 201	Learning Technologies in the PK-6 Classroom	3
C I 204	Social Foundations of Education in the United States	3
C I 245	Strategies in Teaching	2
C I 268	Strategies Practicum	1
C I 332	Educational Psychology of Young Learners	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
SP ED 250	Education of the Exceptional Learner in a Diverse Society	3
Total Credits		18

Secondary education students must complete a professional course sequence:

C I 202	Learning Technologies in the 7-12 Classroom	3
C I 204	Social Foundations of Education in the United States	3
C I 333	Educational Psychology	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
SP ED 401	Teaching Secondary Students with Exceptionalities in General Education	3
Total Credits		15

Some secondary licensure areas also require C I 426 Principles of Secondary Education.

The Curriculum and Instruction department offers a minor in Learning Technologies that may be earned by registering for the program and completing the following courses:

C I 201	Learning Technologies in the PK-6 Classroom	3
or C I 202	Learning Technologies in the 7-12 Classroom	
COM S 107	Applied Computer Programming	3
or COM S 207	Fundamentals of Computer Programming	
or MAT E 370	Toying with Technology	
or CPR E 370	Toying with Technology	

C I 280B	Pre-Student Teaching Experience: Learning Technologies	1-2
C I 302	Principles and Practices of Learning with Technology	3
C I 407	Principles and Practices of Distance Learning	3
C I 454	Emerging Topics in Learning Technologies (3 credits required)	1-3
Total Credits		14-17

The Department of Curriculum and Instruction offers courses that can lead to a reading endorsement for grades K-8 or grades 5-12. Students seeking a K-8 endorsement should consult with a Curriculum and Instruction academic adviser. The 5-12 endorsement is offered collaboratively with the English Department. Students seeking this endorsement should consult with an adviser in the English Department. Inquiries can be sent to the Licensure Analyst in Teacher Education Services (133 MacKay) to receive a list of courses needed for an Iowa State University reading endorsement. Prerequisites for the reading endorsement courses are listed in the catalog course descriptions.

Early Childhood Education-Unified

The undergraduate curriculum in Early Childhood Education-Unified leads to the Bachelor of Science Degree. See curriculum.

The curriculum in Early Childhood Education – Unified is planned for students preparing to teach young children and work with their families. This program leads to careers in working with young children (both those who are typically developing and those with special needs) from birth through age eight. Graduates in this curriculum may teach in early childhood (preschool and primary) classrooms or home based programs, with emphasis on inclusive services. Graduates may be employed by either public or private agencies or schools. This curriculum has been approved by the Iowa Department of Education and meets requirements for the early childhood education - unified teacher license. The program is an interdepartmental major administered by the Department of Curriculum and Instruction and the Department of Human Development and Family Studies within the College of Human Sciences.

Early childhood education-unified majors must satisfy a world languages requirement for graduation.

Students who enroll in early childhood education–unified must apply to and be accepted into the teacher education program prior to enrolling in advanced courses. All early childhood education-unified students, including those seeking a double major, must meet general education requirements for teacher licensure. Iowa State University is in compliance with the Iowa Department of Education's mandate for a performance-based system of teacher training. The State of Iowa has developed and implemented a competency system to evaluate the performance of all teachers. A detailed list of the twelve Iowa State University Teacher Education Standards and the eight State of Iowa Teaching Standards, along with other information about the University Teacher Education Program, can be found at <http://www.teacher.hs.iastate.edu/>, the teacher education website. Additional information is also available from the student's academic adviser. Students in early childhood education – unified must meet the performance outcome standards for teacher licensure. Standards are assessed in coursework through artifacts such as assignments, projects, or practicum participation. These standards assessments are based on the early childhood content standards for endorsement 100 in the State of Iowa. These include competencies in (1) child growth, development, and learning, (2) developmentally appropriate learning environment and curriculum implementation, (3) health, safety, and nutrition, (4) family and community collaboration, and (5) professionalism. Pre-student teaching field experiences and student teaching experiences in at least two different settings is required. Students will receive both formative and summative evaluations of their progress toward meeting these outcomes throughout their program at Iowa State University

Elementary Education

The undergraduate curriculum in elementary education leads to the Bachelor of Science degree.

The curriculum in elementary education is planned for students preparing to teach at the elementary school level. This program leads to careers in working with school-aged children in kindergarten through sixth grade. Graduates in this curriculum may teach in elementary classrooms in either public or private schools.

Endorsements in art, English/language arts, English as a Second Language (ESL), health, history, music, basic science, social studies, mathematics, special education (Instructional Strategist I: Mild/Moderate Disabilities K-8), and speech communication/theater are available for elementary education students. An

endorsement for teaching world languages in elementary schools is available through the Department of World Languages and Cultures.

Elementary education majors must satisfy a world languages requirement for graduation.

Students who enroll in elementary education must apply and be accepted into the teacher education program prior to enrolling in advanced elementary education courses. Iowa Department of Education licensure requirements state that every student must meet the performance outcome standards for teacher licensure. Standards will be assessed in each course and students will receive both formative and summative evaluations of their progress toward meeting these standards throughout their program at Iowa State University. A detailed explanation of the standards and assessment process may be found on the department's website (<http://www.ci.hs.iastate.edu/>). The same information is also available from the student's academic adviser.

Graduates of the elementary education program will be able to demonstrate:

- their understanding of concepts and structures of disciplines, tools of inquiry, how students learn and develop, and the effects of individual differences on learning;
- a broad range of instructional strategies, including knowledge of technology applicable to instruction;
- the ability to stimulate active inquiry with collaboration and supportive interaction among their students; and
- their ability to develop professional relationships with colleagues, parents, and agencies that support students and their learning in appropriate settings.

Secondary Education

For specific requirements for each area of specialization, see Teacher Education and curricula for the college in which the chosen degree major is sought.

Students seeking recommendations for a license to teach in the secondary schools must be admitted to the teacher education program and pursue a program that includes the professional core:

C I 202	Learning Technologies in the 7-12 Classroom	3
C I 204	Social Foundations of Education in the United States	3
C I 333	Educational Psychology	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
C I 426	Principles of Secondary Education	3
SP ED 401	Teaching Secondary Students with Exceptionalities in General Education	3

Total Credits 18

Notes:

- Students seeking licensure in physical education, agriculture and science do not take C I 426 Principles of Secondary Education.
- Students seeking a teaching license in physical education must see an adviser in the Department of Kinesiology in the College of Human Sciences.
- All students who are recommended by Iowa State University for teacher licensure must meet the requirements of the teacher education program and be recommended by the Associate Dean for Teacher Education.
- Each student must meet the performance outcome standards for teacher licensure. Each standard will be assessed in every major. Students will receive both formative and summative evaluations of their progress toward meeting these outcomes throughout their program at Iowa State University.
- A detailed explanation of the standards and assessment process may be found at <http://www.teacher.hs.iastate.edu/>. For more information, students should contact the academic adviser in their major. Each student will be enrolled in the department in which he or she plans to major, and must meet the graduation requirements of that department and the college in which it is situated.

Graduate Study

The Department of Curriculum and Instruction offers work for the degrees Master of Science, Master of Education, and Doctor of Philosophy with a major in education and minor work to students taking major work in other departments. Within the education major in the Department of Curriculum and Instruction a student may earn an education degree with no area of specialization (master's and doctorate) or specialize in special education (master's only), or curriculum and instructional technology (master's and doctorate). The special education specialization is designed to prepare candidates as practitioners and

researchers in the field of mild/moderate disabilities or behavioral disorders/ learning disabilities. The specialization in curriculum and instructional technology is designed to prepare candidates as researchers and practitioners in the fields of curriculum and instructional technology.

Students may also opt not to select an area of specialization. These students are asked to select a focus area for their graduate study. Focus areas include educational foundations, world language education, literacy education, mathematics education, multicultural education and international curriculum studies, and science education. See the Curriculum and Instruction web site at <http://www.ci.hs.iastate.edu/> for more information on these focus areas.

A minor is available in curriculum and instructional technology at both the master's and doctoral level. Information about the minors can be found on the web at http://www.cltf.iastate.edu/student/degree_programs.php.

Prerequisite to major graduate work in education is preparation substantially equivalent to the completion of one of the undergraduate curricula in education offered at Iowa State University, or graduate preparation in a discipline to be used as a teaching field in a community college or university, and adequate proof that the student ranks above average in scholastic ability and promise of professional competence.

The world language requirement, if any, for the Ph.D. degree will be determined by the student's program of study committee. If no world language is required, the total program must consist of a minimum of 78 semester credits, at least 12 of which must be earned outside the education major, and at least 16 of which must be earned outside the area of specialization. Statistics and research methods may not be included in the 16 credits. Should world language be included, the program of study committee may adjust the minimum program requirement downward, but in no instance may the program of study be less than 72 semester credits. Students whose native language is not English may substitute competence in English. All applicants for the Ph.D. must submit Graduate Record Examination (GRE) scores.

Other graduate programs related to education (including General Graduate Studies) may be planned for students on the basis of previous education and experiences as well as future plans and needs. Students should refer to Agricultural Education and Studies, Family and Consumer Sciences Education, Kinesiology, Educational Leadership and Policy Studies, and General Graduate Studies or to graduate level course offerings within other departments.

Graduate Teacher Licensure Programs

A Master of Arts in Teaching degree program leading to teacher licensure (science only) is available to students who currently have a bachelor's degree in science (or a closely related field). A teacher licensure program in mathematics education is also available to graduate students (Department of Curriculum and Instruction). Teacher licensure at the graduate level is also offered in agricultural education (College of Agriculture and Life Sciences) and family and consumer sciences (College of Human Sciences). The Department of Curriculum and Instruction provides the professional education coursework.

Students in a graduate teacher licensure program must complete:

SP ED 501	Teaching Secondary Students with Exceptionalities in General Education	3
C I 505	Using Technology in Learning and Teaching	3
C I 506	Multicultural Foundations of School and Society: Advanced	3
C I 529	Educational Psychology and the Secondary Classroom	3
H P C 504	Studies in the Foundations of Education in the United States	3
Total Credits		15

Mathematics licensure students also take C I 526 Principles of Secondary Education.

Graduate level teaching endorsements are offered through the Department of Curriculum and Instruction. Graduate students who seek a teaching endorsement in special education, but do not wish to pursue a master's degree can incorporate those courses in a professional certificate program. Endorsement programs include Instructional Strategist I: Mild/Moderate Disabilities (K-8 or 5-12), or Instructional Strategist II: Behavior Disorders/Learning Disabilities, and special education consultant. A graduate level reading endorsement is also available.

Graduate Certificate Programs

The Department of Curriculum and Instruction offers Graduate Certificate programs to allow students to enhance their skills outside of full degree programs. The Certificate programs currently offered include Instructional Design, Literacy Coaching, and Special Education.

The Instructional Design Certificate is designed for those working in education, training, professional development, design, and/or outreach who wish to accredit and enhance their knowledge and skills in instructional design. All credits earned toward the Instructional Design Certificate are Iowa State University graduate credits and can be earned before, after, or concurrently with a master or doctoral degree. More information about the Instructional Design Certificate is available at <http://www.ci.hs.iastate.edu/gcert-id/>.

The Literacy Coaching Certificate program consists of a series of advanced graduate level courses (17 semester credits) aimed at preparing eligible classroom teachers, instructional leaders, and other school personnel to serve in literacy leadership roles with the goal of improving teacher practices and student achievement in diverse PreK-12 school settings. The Literacy Coaching Certificate program provides a unique opportunity to develop deep expertise in literacy research, policy, and practice, as well as skill in leadership at a leading university supported by two outstanding programs within the College of Human Sciences at Iowa State University: Literacy Education and Educational Administration. More information about the Literacy Coaching Certificate is available at <http://www.ci.hs.iastate.edu/literacy/index.php>.

The Special Education Certificate program allows educators who already hold a general education teaching license to complete the coursework necessary to each a teaching endorsement in Special Education. Both the Instructional Strategist I: Mild/Moderate Disabilities (K-6 and 712) and the Instructional Strategist II: Behavior Disorders/Learning Disabilities endorsements are available. The programs use a hybrid distance education model to provide accessible coursework, combining video conferencing with a limited number of on-campus sessions. More information about the Special Education Certificate program is available at <http://www.ci.hs.iastate.edu/sped/gradprosp.php>.

Curriculum in Elementary Education

The curriculum in Elementary Education is planned for students preparing to teach in grades kindergarten through six. For additional information, see Index, Elementary Education.

Teaching endorsements in areas closely related to elementary education, are available for elementary education majors. These include Art, English as Second Language K-12, English/Language Arts, Health, History, Mathematics, Music, Science (basic), Social Studies, Special Education (Instructional Strategist I: Mild/Moderate K-8), Speech Communication/Theater, World Language. See Teacher Education, Courses and Programs, for additional information about endorsements.

Additional teaching endorsements, available at the graduate level to individuals who hold a valid Iowa teaching license, include the following: K-6 world language, reading, and special education (Instructional Strategist II: Behavior Disorders/Learning Disabilities, ages 5-21).

A minor in learning technologies is available; see requirements under Curriculum and Instruction Courses and Programs.

Communication Proficiency

To meet graduation requirements, all students must have a C (2.0) or better for each of ENGL 150 Critical Thinking and Communication and ENGL 250 Written, Oral, Visual, and Electronic Composition.

U.S. Diversity and International Perspectives

To meet graduation requirements, all students must complete 3 cr. of course work in U.S. Diversity and 3 cr. in International Perspectives. See department for approved lists of courses.

World Language and Culture Requirement

Elementary education majors must satisfy a graduation requirement equivalent to the first year of university-level study in one world language (normally, completion of a two-semester sequence in any one world language). The requirement may be met by completion of three or more years of high school study in one world language.

Students who have completed three or more years of French, German, or Spanish in high school may not receive graded credit for WLC 101/102 in those languages; test-out credit (T credit) may be obtained by passing an appropriate examination

or by completing an advanced sequence (200-level or higher) in that language. If these students choose to take WLC 101/102 on a remedial basis, they will be graded S-F. Certification in American Sign Language is recognized by the University and satisfies the world languages requirement for the curriculum in elementary education.

Total credits required: 128.5.

General Education*: 45.5

Communication skills:

LIB 160	Information Literacy	1
ENGL 150	Critical Thinking and Communication	3
ENGL 250	Written, Oral, Visual, and Electronic Composition	3
Select one of the following:		3
COMST 102	Introduction to Interpersonal Communication	
COMST 218	Conflict Management	
COMST 317	Small Group Communication	
SP CM 212	Fundamentals of Public Speaking	
SP CM 312	Business and Professional Speaking	
SP CM 313	Communication in Classrooms and Workshops	
SP CM 322	Argumentation, Debate, and Critical Thinking	
SP CM 327	Persuasion	

Total Credits 10

Social sciences:

HD FS 102	Individual and Family Life Development	3
or PSYCH 230	Developmental Psychology	
American Government or American History		3
Option		3
Total Credits		9

Humanities:

Select 9 cr.

Mathematics:

MATH 195	Mathematics for Elementary Education I	3
MATH 196	Mathematics for Elementary Education II	3
One course from the following		3
MATH 104	Introduction to Probability and Matrices	
MATH 105	Introduction to Mathematical Ideas	
MATH 140	College Algebra	
MATH 142	Trigonometry and Analytic Geometry	
MATH 150	Discrete Mathematics for Business and Social Sciences	
MATH 160	Survey of Calculus	
MATH 165	Calculus I	
MATH 181	Calculus and Mathematical Modeling for the Life Sciences I	
MATH 297	Intermediate Topics for School Mathematics	
STAT 101	Principles of Statistics	

Total Credits 9

Biological/Physical Sciences:

Biological Sciences		3
ANTHR 202	Introduction to Biological Anthropology and Archaeology	
BIOL 101	Introductory Biology	
BIOL 155	Human Biology	
BIOL 173	Environmental Biology	
BIOL 211	Principles of Biology I	
BIOL 255	Fundamentals of Human Anatomy	
BIOL 256	Fundamentals of Human Physiology	
BIOL 258	Human Reproduction	
Physical Sciences		3
ASTRO 120	The Sky and the Solar System	
ASTRO 150	Stars, Galaxies, and Cosmology	
CHEM 160	Chemistry in Modern Society	
CHEM 163	College Chemistry	
CHEM 177	General Chemistry I	

GEOL 100	The Earth	
GEOL 101	Environmental Geology: Earth in Crisis	
MTEOR 206	Introduction to Weather and Climate	
PHYS 101	Physics for the Nonscientist	
PHYS 111	General Physics	
Option		3
Total Credits		9

Area of specialization:** 18 cr.

(Require 24 cr.; 9 cr. from an area specialization may be used to meet other requirements.)

Professional education:** 68 cr.

Required courses: 24 Credits

C I 201	Learning Technologies in the PK-6 Classroom	3
C I 204	Social Foundations of Education in the United States	3
C I 245	Strategies in Teaching	2
C I 268	Strategies Practicum	1
C I 332	Educational Psychology of Young Learners	3
C I 406	Multicultural Foundations of School and Society: Introduction	3
HD FS 226	Development and Guidance in Middle Childhood	3
HD FS 240	Literature for Children	3
SP ED 250	Education of the Exceptional Learner in a Diverse Society	3
Total Credits		24

Required methods: 21 Credits

21 Credits Required

C I 377	The Teaching of Reading and Language Arts in the Primary Grades (K-3)	4
C I 468A	Supervised Practicum in Teaching: Primary Grades, Reading & Language Arts. Cr. 1	1-2
C I 378	The Teaching of Reading and Language Arts in the Intermediate Grades (4-6)	4
C I 468B	Supervised Practicum in Teaching: Intermediate Grades, Reading & Language Arts. Cr. 1	1-2
C I 448	Teaching Children Mathematics	3
C I 468C	Supervised Practicum in Teaching: Mathematics	1-2
C I 449	The Teaching of Science	3
C I 468D	Supervised Practicum in Teaching: Science	1-2
C I 443	The Teaching of Social Studies	3

Related Methods: 6 Credits

Choose 6 credits from the following:

H S 275	Health Education in the Elementary School	3
ARTED 211	Introduction to Art Education	3
MUSIC 265	Music in Elementary Education	2
KIN 284	Elementary and Pre-school Movement Education	3

Student teaching: 16 Credits

Choose 16 credits from the following:

C I 416A	Supervised Student Teaching - Elementary: Primary grades (K-3).	arr	†
C I 416D	Supervised Student Teaching - Elementary: International Student Teaching - Primary grades.	arr	†
C I 416B	Supervised Student Teaching - Elementary: Intermediate grades (4-6).	arr	†
C I 416E	Supervised Student Teaching - Elementary: International Student Teaching - Intermediate grades.	arr	†
SP ED 416	Supervised Student Teaching (special education students only)	arr	†

† Arranged with instructor.

Orientation: 1 Credit

C I orientation course. See department for details

C I 315 Transfer Orientation

One of the following:

*Refer to departmental curriculum sheet, available from adviser, for specific course requirements

**Must receive a C or above in each of the courses listed

Courses primarily for undergraduates:**C I 201. Learning Technologies in the PK-6 Classroom.**

(2-2) Cr. 3. F.S.Alt. SS., offered 2013.

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 2014.

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: Restricted to ECE majors*

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.

C I 245. Strategies in Teaching.

(2-0) Cr. 2. F.S. *Prereq: C I 204; HD FS 220 or HD FS 224 or HD FS 226 (or concurrent enrollment in one of these courses); concurrent enrollment in C I 268; 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 268. Strategies Practicum.

(0-2) Cr. 1. F.S. *Prereq: C I 204*

Clinical experience, to be taken concurrently with C I 245. Offered on a satisfactory-fail basis only.

C I 280. Pre-Student Teaching Experience.

(1-8) Cr. 0.5-2. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone.*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: Teacher Aide.

(1-8) Cr. 0.5-2. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone. Restricted to students with full admission to the University Teacher Education Program.*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: Learning Technologies.

(1-8) Cr. 1-2. Repeatable. F.S. *Prereq: C I 201 or 202; permission of instructor for 2 credits.*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: Native American Tutoring.

(1-8) Cr. 1. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone. For enrollment in C I 280B-I, C I 280A must be either a prerequisite or taken concurrently*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: Museum Education.

(1-8) Cr. 0.5-2. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone. For enrollment in C I 280B-I, C I 280A must be either a prerequisite or taken concurrently*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: Multicultural Youth Experience.

(1-8) Cr. 0.5-2. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone. For enrollment in C I 280B-I, C I 280A must be either a prerequisite or taken concurrently*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: International Student.

(1-8) Cr. 0.5-2. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone. For enrollment in C I 280B-I, C I 280A must be either a prerequisite or taken concurrently. Permission of instructor required.*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: Mild/Moderate Disabilities.

(1-8) Cr. 1-2. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone. For enrollment in C I 280B-I, C I 280A must be either a prerequisite or taken concurrently. Concurrent with SP ED 330.*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280L. Pre-Student Teaching Experience: Early Field Experience.

Cr. 0.5-2. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone. For enrollment in C I 280B-I, C I 280A must be either a prerequisite or taken concurrently*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280M. Pre-Student Teaching Experience: Secondary Science.

(1-8) Cr. 1-2. Repeatable. F.S.SS. *Prereq: C I 280A may be taken alone. For enrollment in C I 280B-I, C I 280A must be either a prerequisite or taken concurrently*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: Cohort Field Experience.

(1-8) Cr. 1-2. Repeatable. F.S. *Prereq: Permission of department required.*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. 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: Art Education Field Experience.

(1-8) Cr. 1-2. Repeatable. F.S. *Prereq: C I 280A may be taken alone. For enrollment in C I 280B-I, C I 280A must be either a prerequisite or taken concurrently. Permission of department required.*

Field experience in area educational settings. 2 1/2-hour blocks of time needed for field experience. Offered on a satisfactory-fail basis only. C I 280 may be taken more than once for credit toward graduation.

C I 280S. Field Experience for Secondary Teaching Preparation: Pre-Student Teaching Experience for ESL.

(0-4) Cr. 1. Repeatable, maximum of 2 times. F.S.

Pre-student teaching experience in a school setting. Level two clinical experience for students who are pursuing the ESL endorsement. Students will be required to teach one lesson.

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. Students will examine current trends in the use of learning technologies with K-12 students; explore the use of Web 2.0 applications in the classroom; and delve into issues and trends in classroom technology use. Required for Learning Technologies minor.

C I 315. Transfer Orientation.

Cr. 1. F.S.

Overview of elementary education requirements, curricular opportunities, and university procedures. Program planning. Required of all transfer students majoring in 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 birth to grade 6. Implications of theory for teaching children and for assessing learning in educational settings with young and grade school aged 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, HD FS 226 (EI Ed majors) or HD FS 221 (ECE majors); concurrent enrollment in C I 448, C I 468A, C I 468C (EI Ed majors) or C I 438, C I 468F, C I 468G, SP ED 368, HD FS 343 (ECE majors)*

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*

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 Reading in Middle and Secondary Schools.

(Dual-listed with C I 595). (3-0) Cr. 3. F. *Prereq: C I 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: C I 201 or C I 202, C I 332 or C I 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 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.

C I 416. Supervised Student Teaching - Elementary.

Cr. arr. 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. 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. 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. 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. 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. 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 417. Student Teaching.

(Cross-listed with ENGL). Cr. arr. F.S. *Prereq: 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 417A. Student Teaching: Social Studies-Middle School.

(Dual-listed with C I 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 C I 517B). Cr. arr. F.S. *Prereq: Full admission to teacher education, approval of coordinator during semester before student teaching*
 Supervised student teaching in the liberal arts at the secondary level.

C I 417C. Student Teaching: Mathematics.

(Dual-listed with C I 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 C I 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: 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. 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 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: 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 417S. Student Teaching: Music-Secondary.

(Dual-listed with C I 517S). (Cross-listed with MUSIC). 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 418. Secondary Science Methods I: A Research-Based Framework for Teaching Science.

(Dual-listed with C I 518). (2-0) Cr. 2. F. *Prereq: C I 280M; concurrent enrollment in 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.

(Dual-listed with C I 519). (2-0) Cr. 2. 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 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 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*

Study, development, and application of current methods for providing appropriate mathematics learning experiences for primary grade children. Formal and informal assessment strategies and instructional methods for diverse learners.

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 443. 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 2012. *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. Corrective Reading.

(Dual-listed with C I 552). (3-0) Cr. 3. S. *Prereq: C I 378 or equivalent; undergraduate students must register concurrently for SP ED 365, SP ED 436; graduate students must have a teaching license*

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.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. Supervised Practicum in Teaching.

(2-2) Cr. 2. F.S.SS. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468A. Supervised Practicum in Teaching: Primary Grades, Reading & Language Arts. Cr. 1.

Cr. 1-2. F.S.SS. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468B. Supervised Practicum in Teaching: Intermediate Grades, Reading & Language Arts. Cr. 1.

Cr. 1-2. F.S.SS. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468C. Supervised Practicum in Teaching: Mathematics.

Cr. 1-2. F.S.SS. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468D. Supervised Practicum in Teaching: Science.

Cr. 1-2. F.S.SS. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468E. Supervised Practicum in Teaching: World Language.

Cr. 1-2. F.S.SS. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468F. Supervised Practicum in Teaching: Primary Grades, Literacy, Inclusive.

Cr. 1-2. F.S.SS. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468G. Supervised Practicum in Teaching: Primary Grades, Mathematics, Inclusive.

Cr. 1-2. F.S.SS. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468I. Supervised Practicum in Teaching: Primary Grades, Science, Inclusive.

Cr. 1-2. F.S. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468J. Supervised Practicum in Teaching: Secondary Science I.

Cr. 1-2. F.S. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468K. Supervised Practicum in Teaching: Secondary Science II.

Cr. 2. F.S. *Prereq: Admission to teacher education program*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 468R. Supervised Practicum in Teaching: Reading Endorsement.

Cr. 1-2. F.S.SS. *Prereq: Admission to teacher education program. Permission of department required; concurrent enrollment in C I 378*

Observation, application of current methods, and instructional experiences with children in a supervised elementary classroom while engaged in other elementary methods courses. Offered on a satisfactory-fail basis only.

C I 480. Field Experience for Secondary Teaching Preparation.

Cr. 0.5-2. 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. (S/F grading may be used in some offerings of some sections.).

C I 480A. Field Experience for Secondary Teaching Preparation: History/ Social Sciences.

(Cross-listed with HIST). Cr. 0.5-2. 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. (S/F grading may be used in some offerings of some sections.).

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. Field Experience for Secondary Teaching Preparation: Mathematics.

Cr. 0.5-2. 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. (S/F grading may be used in some offerings of some sections.).

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. Field Experience for Secondary Teaching Preparation: English and Literature.

Cr. 0.5-2. 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.

C I 480G. Field Experience for Secondary Teaching Preparation: World Languages and Cultures.

Cr. 0.5-2. 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.

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. Field Experience for Secondary Teaching Preparation: Music.

(Cross-listed with MUSIC). Cr. 0.5-2. 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. (S/F grading may be used in some offerings of some sections.).

C I 480M. Field Experience for Secondary Teaching Preparation: Middle School.

Cr. 0.5-2. 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. (S/F grading may be used in some offerings of some sections.).

C I 480S. Field Experience for Secondary Teaching Preparation: ESL English as a Second Language.

(0-4) Cr. 2. Repeatable, maximum of 2 times. *Prereq: C I 280S, ENGL/LING 219; ENGL/LING 220; ENGL/LING 511*

Observation and participation in a variety of school settings after admission into the Teacher Preparation Program. Three-level clinical experience for students who are pursuing the ESL endorsement. Supervised experience. Students are required to teach two lessons.

C I 481. Philosophy of Education.

(Dual-listed with C I 581). (3-0) Cr. 3. Alt. F., offered 2013.

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 WLC, LING). (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. Nonmajor graduate credit.

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*

Theories and principles of contemporary world language learning and teaching. Special emphasis on designing instruction and assessments for active learning.

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: SP CM 313; 9 credits in speech communication; minimum grade point average 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

Theory and methods for teaching mathematics in grades 7-12. Includes critical examination of instructional strategies, curriculum materials, learning tools, assessment methods, National Standards in Mathematics Education, and equity issues.

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.

(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 software and hardware for teaching and learning. Research on computers. Tool software. Telecommunications. Trends in computer-based instruction.

C I 506. Multicultural Foundations of School and Society: Advanced.

(3-0) Cr. 3. F.S.SS. *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.SS. *Prereq:* C I 501, 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, 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, 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 2013. *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). (Cross-listed with C I). Cr. arr. F.S. *Prereq:* Full admission to teacher education, approval of coordinator during semester before student teaching

Supervised student teaching in the liberal arts at the secondary level.

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

Supervised student teaching in the liberal arts at the secondary level.

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

Supervised student teaching in the liberal arts at the secondary level.

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

Supervised student teaching in the liberal arts at the secondary level.

C I 517G. Student Teaching: World Language.

(Dual-listed with C I 417G). (Cross-listed with WLC). 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 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*

Supervised student teaching in the liberal arts at the secondary level.

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*

Supervised student teaching in the liberal arts at the secondary level.

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: 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 517S. Student Teaching: Music-Secondary.

(Dual-listed with C I 417S). (Cross-listed with MUSIC). 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 518. Science Methods I: A Research-Based Framework for Teaching Science.

(Dual-listed with C I 418). (2-0) Cr. 2. 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.

(Dual-listed with C I 419). (2-0) Cr. 2. 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 506*

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: 6 credits in education*
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. S.SS. *Prereq: Bachelor's degree*

Critical 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: Concurrent enrollment in C I 518 or permission of instructor*

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. S.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 2012. *Prereq: Graduate classification and completion of C I 506 or permission of instructor*

Examination of cultural relevance in education. Development and application of strategies and techniques for implementing multicultural goals and multi-ethnic 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 2011. *Prereq: Teaching license*

Analyzing, discussing, and researching the theory and practice of current literacy issues.

C I 552. Corrective Reading.

(Dual-listed with C I 452). (3-0) Cr. 3. F.S.SS. *Prereq: C I 378 or equivalent; undergraduate students must register concurrently for SP ED 365, SP ED 436; graduate students must have a teaching license*

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 2012. *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.SS. *Prereq: Teaching license*
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 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 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 LEGOs 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 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 581. Philosophy of Education.

(Dual-listed with C I 481). (3-0) Cr. 3. Alt. F., offered 2013.
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 588. Supervised Tutoring in Reading.

(2-2) Cr. 3. F.S.SS. *Prereq: Graduate status, teaching license and concurrent enrollment in or completion of one course in corrective reading; diagnosis and correction of reading problems*

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. Supervised Field Experience.

(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 591B. Supervised Field Experience: World Language 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 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. Supervised Field Experience: Secondary 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 591F. Supervised Field Experience: Multicultural 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 591G. Supervised Field Experience: Mathematics 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 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 Reading in Middle and Secondary Schools.

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

Theory and methods for teaching mathematics in grades 7-12. Includes critical examination of instructional strategies, curriculum materials, learning tools, assessment methods, National Standards in Mathematics Education, and equity issues.

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 in a sequence welcoming new Curriculum and Instruction PhD 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.

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: 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*

Courses primarily for undergraduates:**SP ED 250. Education of the Exceptional Learner in a Diverse Society.**

(3-0) Cr. 3. F.S. *Prereq: C I 204*

An overview of students with diverse learning needs, including legal foundations. Emphasis on early identification; educational programming, services and strategies; and preparation for community living in a heterogeneous society. Meets U.S. Diversity Requirement

SP ED 330. Introduction to Instruction for Students with Mild/Moderate Disabilities.

(3-0) Cr. 3. F. *Prereq: SP ED 250, concurrent enrollment in C I 280I, C I 377*

Educational services and programming for students with mild/moderate disabilities examined from an historical perspective. Current trends, issues, impact of federal and state laws, and identification procedures. Characteristics of students with mild/moderate disabilities.

SP ED 334. Teaching Exceptional Learners in the General Classroom.

(3-0) Cr. 3. F. *Prereq: Concurrent enrollment in SP ED 330*

Evidence-based teaching strategies and instructional accommodations for inclusive education. Emphasis on managing challenging behavior.

SP ED 355. Classroom Assessment in Inclusive Primary Settings.

(2-0) Cr. 2. F.S. *Prereq: Concurrent enrollment in SP ED 455; C I 433, C I 439, C I 468I*

Examination and application of strategies for determining special educational needs, planning and evaluating instructional programs, and monitoring student progress.

SP ED 365. Classroom Assessment for Special Education.

(3-0) Cr. 3. S. *Prereq: SP ED 330; C I 377*

Formal and informal diagnostic instruments. Determination of special education needs. Planning, adaptation, and formative evaluation of instructional programs for students with mild/moderate disabilities.

SP ED 368. Teaching in Inclusive Primary Settings.

(1-0) Cr. 1. F.S. *Prereq: Concurrent enrollment in C I 377, C I 438, C I 468F, C I 468G*

Federal and state law. Service delivery models. Issues related to providing instruction that meets the needs of diverse learners in inclusive primary settings.

SP ED 401. Teaching Secondary Students with Exceptionalities in General Education.

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

Overview of characteristics and needs of exceptional children/youth and appropriate service delivery options. Legal foundations for special education. Emphasis on co-teaching models, differentiated instruction, accommodations for instruction and assessment, and collaboration among professionals and parents.

SP ED 416. Supervised Student Teaching.

Cr. arr. F.S. *Prereq: Full admission to teacher education, senior classification, elementary education major; SP ED 330, SP ED 334, SP ED 365, SP ED 436, SP ED 439, C I 280I, C I 452*

Reservation required.

SP ED 436. Instructional Methods for Students with Mild/Moderate Disabilities.

(3-0) Cr. 3. S. *Prereq: C I 245, concurrent enrollment in SP ED 365*

Evidence-based instructional strategies/techniques in academic areas and materials for individual instruction and classroom management for elementary students with mild/moderate disabilities.

SP ED 455. Instructional Methods for Inclusive Primary Settings.

(2-0) Cr. 2. F.S. *Prereq: Concurrent enrollment in SP ED 355; C I 433, C I 439, C I 468I*

Evidence-based instructional strategies and techniques in academic areas that support the learning of students with diverse learning needs. Emphasis on accommodations and alternative teaching strategies to meet individual student needs.

SP ED 459. Field Experience - Students with Mild/Moderate Disabilities.

(0-2) Cr. 1. F. *Prereq: SP ED 365, SP ED 436, concurrent enrollment in SP ED 460*

Observation and involvement with students with mild/moderate disabilities in school settings. Offered on a satisfactory-fail basis only.

SP ED 460. Special Education Seminar.

(1-0) Cr. 1. F. *Prereq: SP ED 436, concurrent enrollment in SP ED 459*

Application of evidence-based instructional strategies/techniques in academic and behavioral areas with students who have mild/moderate disabilities. Discussion of professional practices.

SP ED 464. Collaborative Partnerships in Special Education.

(3-0) Cr. 3. F. *Prereq: SP ED 365, SP ED 436*

Collaborative skills used in education of students with mild/moderate disabilities. Includes collaboration between general and special education teachers, parents, paraeducators, and other education professionals and agencies.

SP ED 490. Independent Study.

Cr. 1-5. F.S. *Prereq: 12 credits in elementary education, permission of department chair*

Courses primarily for graduate students, open to qualified undergraduates:**SP ED 501. Teaching Secondary Students with Exceptionalities in General Education.**

(3-0) Cr. 3. SS. *Prereq: Baccalaureate degree*

Overview of characteristics and needs of exceptional children/youth and appropriate service delivery options. Legal foundations for special education. Emphasis on co-teaching models, differentiated instruction, accommodations for instruction and assessment, and collaboration among professionals and parents. Students complete a literature review on a topic related to students with exceptionalities and their content area.

SP ED 510. Foundations in Mild/Moderate Disabilities.

(3-0) Cr. 3. S. *Prereq: SP ED 501 or equivalent*

Historical and legal foundations for special education. Characteristics, prevalence, and etiology of mild/moderate disabilities. Historical and contemporary models of programming for students with disabilities.

SP ED 511. Foundations of Behavior Disorders and Learning Disabilities.

(3-0) Cr. 3. S. *Prereq: Sp Ed 501 or equivalent*

Study of theory, characteristics, and special education service delivery models to students with moderate/severe behavior/learning disabilities in the public schools and residential settings.

SP ED 515. Assessment of Children and Youth with Disabilities.

(3-0) Cr. 3. F. *Prereq: SP ED 510 or SP ED 511*

Formal and informal methods of assessment for identification/eligibility, IEP development, and progress monitoring. Formative evaluation of academic and behavioral skills, including curriculum-based measurement and functional behavioral assessment.

SP ED 517. Research Review.(2-0) Cr. 2. SS. *Prereq: RESEV 550, SP ED 515*

Critical review of recent research in education and related behavioral sciences as applied to education of students with disabilities. Examination of multiple research methodologies.

SP ED 520. Evidence-based Practices for Mild/Moderate Disabilities.(3-0) Cr. 3. *Prereq: SP ED 510, SP ED 515*

Evidence-based instructional methods for meeting the academic and behavioral needs of students with mild/moderate disabilities. Includes methods, strategies, and behavior management techniques appropriate for students with mild or moderate disabilities.

SP ED 530. Evidence-based Practices in Behavior Disorders.(3-0) Cr. 3. S. *Prereq: SP ED 511, SP ED 515*

Current research on evidence-based interventions designed to improve the behavior and social skills of students with moderate/severe behavior disorders. Particular emphasis on positive behavioral supports and behavior change strategies.

SP ED 540. Evidence-based Practices in Learning Disabilities.(3-0) Cr. 3. S. *Prereq: SP ED 511, SP ED 515*

Current research on evidence-based interventions designed to improve the academic performance of students with moderate/severe learning disabilities. Particular emphasis on methods for improving reading, written expression, and mathematics, as well as performance in content-area instruction.

SP ED 553. Teaching Struggling Adolescent Readers.(Cross-listed with C I). (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.

SP ED 555. Career Education and Transition for Youth with Disabilities.(2-0) Cr. 2. SS. *Prereq: SP ED 510 or SP ED 511*

Examination of the academic, personal, social, employability, and daily living skills needed for a satisfactory adult life. Exploration of curricula, programs, and services to meet these needs.

SP ED 560. Classroom Management/Behavior Support.(3-0) Cr. 3. F. *Prereq: Teaching license*

Emphasis on positive behavioral supports and understanding behavior and its context through a functional behavioral approach. Design and development of carefully planned behavioral intervention programs for groups and individual students in general and special education settings.

SP ED 564. Collaborative Consultation.(3-0) Cr. 3. F. *Prereq: SP ED 515, SP ED 520 or SP ED 530 or SP ED 540*

Models of consultation. Characteristics and methods to promote effective collaboration with families, paraprofessionals, other school personnel, and representatives of other agencies. Includes specific attention to IEP development as a collaborative process.

SP ED 565. Role of the Consultant.(1-0) Cr. 1. *Prereq: SP ED 564*

Explore role of the educational consultant in different settings (state department, area education agency, school district, private). Examine roles in relationship to models (mental health, collaborative, organization).

SP ED 567. Teaching Mathematics to Struggling Secondary Learners.(Cross-listed with C I). (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.

SP ED 570. Systems-level Supports for Youth with Behavior and Learning Disabilities.(3-0) Cr. 3. SS. *Prereq: SP ED 511*

Overview of support systems (education, juvenile justice, mental health, communities) that serve students with special education needs. Working with and supporting families.

SP ED 590. Special Topics.Cr. 1-5. F.S. *Prereq: 15 credits in education, permission of department chair***SP ED 591. Supervised Field Experience.**(0-2) Cr. 1-6. F.S. *Prereq: 15 graduate credits in special area, admission to the graduate program in special education*

Supervised on-the-job field experience in special areas.

SP ED 591G. Supervised Field Experience: Mild/Moderate Disabilities, K-8.(0-2) Cr. 1-6. F.S. *Prereq: 15 graduate credits in special area, admission to the graduate program in special education*

Supervised on-the-job field experience in special areas.

SP ED 591H. Supervised Field Experience: Mild/Moderate Disabilities, 5-12.(0-2) Cr. 1-6. F.S. *Prereq: 15 graduate credits in special area, admission to the graduate program in special education*

Supervised on-the-job field experience in special areas.

SP ED 591K. Supervised Field Experience: Behavior Disorders/Learning Disabilities, Ages 5-21.(0-2) Cr. 1-6. F.S. *Prereq: 15 graduate credits in special area, admission to the graduate program in special education*

Supervised on-the-job field experience in special areas.

SP ED 599. Creative Component.Cr. 1-5. F.S.SS. *Prereq: 15 credits in education***Courses for graduate students:****SP ED 615. Seminar.**

(1-0) Cr. 1. Repeatable, maximum of 2 credits.

Selected topics in special education. Analysis of current special education research. Evaluation of impact upon the profession. Implications for additional research.

SP ED 699. Research.Cr. arr. *Prereq: 15 credits in education*