COURSES FOR CURRICULUM AND INSTRUCTION

Curriculum and Instruction Courses

CEE304 Teaching Early Childhood and Elementary School Science
Hours 3
Teaching experiences related to P-6 children's learning of science, with emphasis on teaching strategies that use inquiry approaches. Intensive field experience. Admission to Teacher Education Program is required.
Prerequisite(s): CEE 365, CEE 370, CEE 380, CEE 492, and CEE 495 with a minimum passing grade of C-
Prerequisite(s) with concurrency: CEE 366, CEE 401, CEE 478, CEE 496 and BER 450

CEE320 Survey of Early Childhood and Elementary Education
Hours 3
Surveys early childhood and elementary education as professional careers. Students become acquainted with factors affecting successful teaching in P-6.
Prerequisite(s) with concurrency: CRD 369, CEE 491, and MUE 385

CEE365 Literature for Early Childhood and Elementary Ages
Hours 3
Selection and teaching of literature for P-6 children at various developmental levels, according to interests, needs, and abilities. Intensive field experience. Admission to Teacher Education Program is required.
Prerequisite(s): CEE 320, CRD 369, MUE 385 and CEE 491 with a minimum passing grade of C-
Prerequisite(s) with concurrency: CEE 370, CEE 380, CEE 401, CEE 492, and CEE 495

CEE366 Teaching Social Sciences for Early Childhood and Elementary Children
Hours 3
The nature of P-6 social studies, the resource unit, kinds of materials, teaching procedures, and the evaluation of learning. Intensive field experience. Admission to Teacher Education Program is required.
Prerequisite(s): CEE 365, CEE 370, CEE 380, CEE 492, and CEE 495 with a minimum passing grade of C-
Prerequisite(s) with concurrency: CEE 304, CEE 401, CEE 478, CEE 496, and BER 450

CEE370 Teaching Reading Elem School W
Hours 3
Materials and methods in the teaching of reading, with emphasis on assessment-based instruction and planning a balanced program. Intensive field experience. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course. Admission to Teacher Education Program is required.
Prerequisite(s): CEE 320, CEE 491, CRD 369, and MUE 385
Prerequisite(s) with concurrency: CEE 365, CEE 380, CEE 401, CEE 495, and CEE 492

CEE380 Teaching Early Childhood and Elementary Mathematics
Hours 3
P-6 teaching experiences related to children's developmental learning of mathematics, with emphasis on teaching strategies, manipulatives, and other materials useful in teaching content. Intensive field experience. Admission to Teacher Education Program is required.
Prerequisite(s): CEE 320, CRD 369, MUE 385, and CEE 491 with minimum passing grade of C-
Prerequisite(s) with concurrency: CEE 365, CEE 370, CEE 401, CEE 492, and CEE 495

CEE401 Managing Effective Classrooms
Hours 1-6
This course is designed to teach students the principles and theory of classroom management. Emphasis will be placed on the design and implementation of classroom management methods and techniques.
Prerequisite(s): Admission to Teacher Education Program

CEE478 Teaching Language Arts in Early Childhood and Elementary W
Hours 3
Deepening understanding of the materials and methods for teaching of P-6 language arts with emphasis on planning and implementing a writing program. Intensive field experience. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course. Admission to Teacher Education Program is required.
Prerequisite(s): CEE 365, CEE 370, CEE 380, CEE 492, and CEE 495 with a minimum passing grade of C-
Prerequisite(s) with concurrency: CEE 304, CEE 366, CEE 401, CEE 496, and BER 450

Writing
CEE491 Early Childhood Curr. & Inst.
Hours 3
A foundation in the materials and methods for teaching in early childhood classrooms with an emphasis on child development, assessment, and instruction. Completion of Professional Semester II courses required.
Prerequisite(s) with concurrency: CEE 320, CRD 369, and MUE 385

CEE492 Engaging Children and Families in the Early Childhood Classroom
Hours 3
Students will develop advanced skills in planning and facilitating play-based activities to support the learning and development of children from birth through age eight. Students will use an integrated approach to teaching developmentally appropriate curriculum while building their professional knowledge related to advocacy and family engagement.
Prerequisite(s): CEE 320, CEE 491, CRD 369, MUE 385
Prerequisite(s) with concurrency: CEE 401, CEE 365, CEE 495, CEE 370, CEE 380

CEE495 Practicum
Hours 3
Open only to students in professional semester II of the early childhood and elementary program. This course offers students significant clinical experience and opportunities to plan and teach lessons in P-6. Admission to Teacher Education Program is required.
Prerequisite(s): CRD 369, CEE 320, CEE 491, and MUE 385 with minimum passing grade of C-
Prerequisite(s) with concurrency: CEE 365, CEE 370, CEE 380, CEE 401, and CEE 492

CEE496 Senior Practicum
Hours 3
A field-based course providing opportunities to practice authentic classroom application of various subject areas in P-6 education. Admission to Teacher Education Program is required.
Prerequisite(s): CEE 365, CEE 370, CEE 380, CEE 492, CEE 495 with a minimum passing grade of C-
Prerequisite(s) with concurrency: CEE 304, CEE 366, CEE 401, CEE 478, and BER 450

CEE497 Early Childhood and Elementary Education Internship
Hours 4.5-7.5
Observation, participation, and teaching experiences supervised by selected cooperating teachers in P-6 early childhood and elementary schools. Additional supervision is provided by College of Education personnel.
Prerequisite(s): CEE 304 and CEE 366 and CEE 401 and CEE 478 and CEE 496 and BER 450 with a minimum passing grade of C-
Prerequisite(s) with concurrency: Prerequisite with concurrency EDU 400

CEE515 Science in Early Childhood and Elementary School
Hours 3
Designed to expand knowledge and competencies of early childhood and elementary teachers of science with specific focus on current standards, research, and inquiry models of instruction.

CEE516 Social Science in Early Childhood and Elementary School
Hours 3
The focus is on current trends in early childhood and elementary social studies, with particular attention to innovative instructional modes and to relating learning to the learners’ social environment.

CEE517 Lang Arts In Elem Sch
Hours 3
Designed to extend and strengthen the knowledge and competencies of experienced teachers of communication arts and skills in the elementary school.

CEE525 Issues Trends in Early Childhood and Elem School Science
Hours 3
Focus on current research and trends in early childhood and elementary science with respect to historical, political, and socio-cultural contexts.

CEE526 Implementing Early Childhood and Elementary Social Studies
Hours 3
The focus is on considering and applying to one’s own classroom the research base of investigating social studies curricula and instruction in early childhood and elementary education.

CEE530 Modern Elementary School Programs
Hours 3
The evolving elementary school and its program, with emphasis on analysis of current trends that directly affect modern school practices in a societal context.

CEE532 Early Childhood and Elementary School Curriculum
Hours 3
The purpose of this course is to focus on historical, current trends, and projective perspectives that influence the evolving early childhood and elementary school curriculum framework.

CEE544 Current Trends and Research in Early Childhood Education
Hours 3
Students will review current trends and research related to early childhood education, including curriculum, assessment, play, quality, and family engagement. Students will synthesize and apply research and discuss implications for working with children birth through age eight.

CEE550 Intro to Teaching Early Childhood and Elementary School Science
Hours 3
Introduction to the teaching of science. Current research is emphasized supporting best instructional practices in science.

CEE560 Intro to Teaching Early Childhood and Elementary Social Studies
Hours 3
Teaching P-6 social studies using research-based instructional strategies and curriculum.

CEE565 Classics & Modern Literature for Early Childhood and Elementary Education
Hours 3
Designed to extend and strengthen the knowledge and competencies of experienced teachers in the following areas: major developments in literature for children; genres of children’s literature; and effective methods of helping early childhood and elementary children enjoy and use literature.
Courses for Curriculum and Instruction

CEE570 Teach Reading in the Elementary School
Hours 3
The course provides a foundation in the materials and methods of teaching elementary reading with an emphasis on development, assessment, and instruction for individual and small groups of students. Intensive field experience is required.
Prerequisite(s): CRD 369, CEE 320, CEE 491 and MUE 385
Prerequisite(s) with concurrency: CEE 365, CEE 401, CEE 492, CEE 582 and CEE 595

CEE574 Guiding Early Childhood and Elementary Pupil Learning
Hours 3
Focuses on understanding how students learn, what physiological and environmental factors influence learning and how teachers can facilitate learning using brain-compatible learning. Included are theories-to-applications of brain-based learning research to classroom instructional situations in early childhood and elementary education.

CEE578 Teaching Language Arts in the Early Childhood and Elementary School
Hours 3
Deepening understanding of the materials for teaching of language arts in early childhood and elementary schools with emphasis on planning and implementing a writing program. Intensive field experience. Writing proficiency within the discipline is required for a passing grade in the course.

CEE580 Concepts of Early Childhood and Elementary School Mathematics
Hours 3
Focuses on the current research in P-6 mathematics education concerning how children learn mathematics.

CEE581 Early Childhood and Elementary Math Curriculum Research
Hours 3
Students learn the role and influence of mathematics curriculum and its interconnectedness to instruction and reflect about school, district, state and/or national curriculums. Explore current issues with US mathematics curriculum and unpack curriculum into intended, enacted, and assessed components for early childhood and elementary education.

CEE582 Teaching Mathematics to Early Childhood and Elementary Students
Hours 3
This course prepares students to effectively teach mathematics in P-6. Emphasis is on the current research in mathematics education.

CEE584 Problems
Hours 1-6
Opportunities to study or work independently on topics or projects of individual concern. Credit is based on the nature and degree of student involvement.

CEE585 Practicum in Early Childhood and Elementary Education
Hours 3
Supervised opportunities to apply knowledge and skills in a P-6 setting. Credit is based on the nature and degree of student involvement. Admission to TEP Program is required.
Prerequisite(s): CRD 369, CEE 320, CEE 491, and MUE 385
Prerequisite(s) with concurrency: CEE 365, CEE 401, CEE 492, CEE 570, and CEE 582

CEE586 Advanced Practicum
Hours 3
A field-based course providing graduate students with opportunities to practice authentic classroom application of various content areas in P-6 education. Admission to TEP Program is required.
Prerequisite(s): CEE 365, CEE 492, CEE 570, CEE 582 and CEE 595
Prerequisite(s) with concurrency: CEE 401, CEE 550, CEE 560, CEE 578, BER 450

CEE596 Advanced Practicum
Hours 1-6
Opportunities to study or work independently on topics or projects of individual concern. Credit is based on the nature and degree of student involvement.

CEE597 Internship in Early Childhood Education and Elementary Education
Hours 3-12
Observation, participation, and teaching experiences supervised by selected cooperating teachers in P-6 schools. Additional supervision is provided by College of Education personnel.
Prerequisite(s): CEE 401, CEE 550, CEE 560, CEE 578, CEE 596, and BER 450
Prerequisite(s) with concurrency: EDU 500

CEE598 Non-Thesis Research
Hours 1-3
No description available.

CEE616 Adv Soc Studies Elem Sch
Hours 3
The focus is on current trends and research in elementary social studies with particular attention to innovative instructional modes and relating learning to the learner’s social environment.

CEE687 Topical Research Review
Hours 3
Supervised opportunities to apply knowledge and skills in a professional setting. Credit is based on the nature and degree of student involvement.

CEE690 Advanced Seminar
Hours 1-3
In-class opportunities to analyze and discuss current topics, problems, and/or projects of collective concern. Topics vary.

CEE694 Problems
Hours 1-6
Opportunities to study or work independently on topics or projects of individual concern. Credit is based on the nature and degree of student involvement.
CEE695 Practicum
Hours 1-12
Supervised opportunities to apply knowledge and skills in a professional setting. Credit is based on the nature and degree of student involvement.

CEE697 Specialist Degree Res
Hours 1-6
Systematic classroom inquiry is used to engage students in a teacher action research project.
Prerequisite(s): CEE 687

CEE698 Non-Thesis Research
Hours 1-3
No description available

CEE699 Dissertation Research
Hours 1-12
The independent research course partially fulfills required research dissertation hours toward the doctoral degree. The course is conducted under the guidance of the dissertation advisor. Material covered will be of an advanced nature aimed at providing doctoral students with an understanding of the latest research and current developments within the field. Discussion and advisor guidance will be directed towards readings of research articles and development of research methodology, with the aim of producing an original research contribution that represents a novel development in the field, or a novel perspective on a pre-existing topic in the field.

CIE499 Special Topics in Early Childhood, Elementary, and/or Secondary Education
Hours 1-6
This course, offered on campus or abroad, provides opportunities to engage with topics or projects of collective concern in early childhood, elementary, and/or secondary education. Topics vary. May be repeated. Offered according to demand.
Prerequisite(s): Permission of instructor

CIE523 Teaching Visual Arts
Hours 3
This course will focus on the practice of teaching art education in pre-kindergarten, primary, middle and secondary levels. The theory supporting engaging art education and the available and appropriate tools, strategies and resources will be investigated. Students will develop a working knowledge of art materials and methods appropriate for each level of growth.
Prerequisite(s): CSE 390, EDU 200, SPE 500, CEE 320, BEF 510
Prerequisite(s) with concurrency: CIE 592, CRD 512

CIE524 Improving Visual Arts Instruction
Hours 3
This course will focus on the practice of teaching visual arts education in pre-kindergarten, primary, middle and secondary levels. The theory supporting engaging visual arts education and the available and appropriate tools, strategies and resources will be investigated. Students will develop a working knowledge of art materials and methods appropriate for each level of growth.
Prerequisite(s): CSE 390, EDU 200, SPE 500, CRD 512, BEF 510, CIE 523, CIE 592
Prerequisite(s) with concurrency: EDU 500 and CIE 597

CIE560 Principles in Mathematics Education: Equity & Access Issues
Hours 3
This course explores the principles and foundations of effective, high-leverage mathematics teaching practices and their subsequent impact on students with diverse backgrounds. Teachers, administrators, and/or others are introduced to beliefs, practices, and situations that are related to maximizing student potential and learning opportunities. Access and equity are well-defined, developed, implemented, and assessed for all. This course is for Class B or Class A Educator license.

CIE562 Tesol: Basic Methods
Hours 3
Theories, methods, and strategies for English as a second language that focus on communicative competence and cross-cultural understanding. Admission to TEP Program is required.
Prerequisite(s) with concurrency: CSE 592

CIE567 Improv Foreign Lang Instruct
Hours 3
Critical examination of theoretical perspectives, methods, major issues, and controversies pertinent to teaching foreign language; use of technology in language instruction is a critical component.
CIE575 Teaching Emergent Multilinguals in Public Schools

W

Hours 3

This course explores the pedagogies of translilingual literacies to prepare teachers to serve emergent multilinguals in the U.S. public schools. It offers teacher candidates classroom strategies to make content comprehensive and accessible to emergent multilinguals. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course.

Writing

CIE576 Linguistics Classroom Teachers

Hours 3

This linguistic course enables teachers to understand the basics of how the English language functions. Provides information essential for dealing with students whose native language is not English. Offers useful information about various English dialects as well.

CIE577 Second Language Acquisition

Hours 3

Introduction to and analysis of the main issues and theories in second language acquisition (SLA); students deduce and demonstrate instructional implications.

CIE578 Second Lang Test Assess Evaln

Hours 3

Preparation in the background and skills necessary to construct classroom-based tests, appropriately use published tests, and understand second or foreign language program evaluation.

CIE579 Tch English For Lang Prog/Pol

Hours 3

Theories of language learning, acquiring a second language, and current linguistic theories; emphasis is on programs, policies, and instructional methods of ESL education.

CIE580 Teaching Foreign Languages

Hours 3

Theories, methods, and strategies for foreign language teaching that focus on communicative competence and cross-cultural understanding; use of technology in language education is a critical component. Admission to the TEP Program is required.

Prerequisite(s) with concurrency: CSE 592

CIE582 Dev Util Instr Matrls

Hours 3

No description available

CIE592 Field Work

Hours 1-3

A clinical experience taken concurrently with the methods course and designed to facilitate students’ development of pedagogical skills, effective thinking, and professional problem solving.

CIE597 Elementary/Secondary Internsh

Hours 3-9

Elementary/Secondary Internship.

CIE599 Special Topics in Early Childhood, Elementary, and/or Secondary Education

Hours 1-6

This course, offered on campus or abroad, provides opportunities to engage with topics or projects of collective concern in early childhood, elementary, and/or secondary education. Topics vary. May be repeated. Offered according to demand.

Prerequisite(s): Permission of instructor

CIE605 Teachers and Teaching Practices in Classrooms across the World

Hours 3

The focus of this course is research on teachers and their teaching practice in real classrooms.

CIE606 New Literacies

Hours 3

This course explores and applies theories of new literacies communication, learning, and research.

CIE609 Discourse & Pedagogy

Hours 3

This seminar will provide foundational training for doing discourse analytic work within research of teaching and learning, with a focus on the integration of theory and methodology. Participants will be asked to conduct an analysis of classroom discourse for final evaluation.

CIE610 Effective Teaching

Hours 3

Examination of the knowledge base in effective teaching practice through in-depth study of the research literature on classroom instructional practices and conditions, and on the classroom teacher. Designed specifically for doctoral-level students.

CIE620 Design Res Classrm Teach

Hours 3

The practice and use of reflection and action research with emphasis on developing professional skills in performing and applying research on classroom teaching and learning leading to teacher empowerment and school reform. Designed specifically for doctoral-level students.

CIE621 Writing for Academic Publication

Hours 3

This course will provide doctoral students with information about academic writing and project management. The tools, strategies and resources will be useful as students plan their thesis or dissertation and prepare research for dissemination. Students will learn writing habits, strategies for synthesizing research, and techniques for writing with clarity.

CIE625 Res Sem Science Curriculum

Hours 3

Designed to enable students to understand and synthesize current research and to develop a theoretical framework in the science curriculum for K-12.

CIE626 Res Sem Social Studies Curricl

Hours 3

Designed to enable students to understand and synthesize current research and to develop a theoretical framework in social studies education for K-12.
CIE627 Second Language Literacy
Hours 3
This course is designed to provide the student with an introduction to the major issues in research and instruction in second language (L2) literacy (reading and writing). An emphasis in this course is on literacy as a cognitive skill. The psycholinguistic processes of reading and writing in a second language will be addressed.

CIE630 Curric Classroom Teacher
Hours 3
This course discusses the major issues in curriculum design and implementation for the classroom teacher. Designed specifically for doctoral-level students.

CIE640 Sem Teachr Educ Program
Hours 3
The course focuses on issues, problems, trends, and research associated with undergraduate and graduate teacher education and certification programs in Alabama, the U.S., and the world. Designed specifically for doctoral-level students.

CIE644 Student Teach Supervision
Hours 3
Organization and administration of student-teaching programs and methods of supervising student-teaching in schools. Designed specifically for doctoral-level students.

CIE645 Prof Cont: Tching & Lrning Com
Hours 3
Research-based focus using theoretical frameworks to examine and analyze the professional development continuum.

CIE646 Sem For Language Eductn Resear
Hours 3
Examination and critical analysis of a wide range of perspectives from the professional literature on teaching and learning a foreign language.

CIE660 Cognitive Perspectives
Hours 3
The course focuses on systematic descriptions and analysis of major learning theories for classroom application. The intent is to contribute education insight toward more effective teaching through cognitive processes.

CIE670 Critical Inquiry Curric Pedago
Hours 3
Examinations of different conceptualizations of curriculum and pedagogy in K-12; emphasis on critical theory and postmodern theory and critique.

CIE675 Theory and Research on Emergent Multilinguals
Hours 3
This course explores the current research base and theoretical frameworks for doctoral students to understand the pedagogies of translilingual literacies and study emergent multilinguals in the U.S. public schools.

CIE676 Linguistics Classroom Teachers
Hours 3
This course involves advanced investigation within general areas of applied linguistic studies such as phonology, morphology, syntax, semantics, discourse, pragmatics, writing systems, etc., and their impact on second language acquisition.

CIE680 Sem In Math Educ Research
Hours 3
Designed to enable students to understand and synthesize current research and to develop a theoretical framework in mathematics education.

CIE686 Research on Science Teaching
Hours 3
Principles and practices of research into science teaching with a focus on building researchers’ professional identities in the field. Topics include the field-specific nature, purposes, methods, rhetoric and impact of research into science teaching.
Prerequisite(s): BER 600, BER 631, and BER 640. Instructor Permission required.

CIE693 Workshop
Hours 1-6
In-class opportunities to study or work on topics or projects of collective concern. Topics vary. May be repeated. Offered according to demand.

CRD369 Foundations of Reading Instruction for Early Childhood and Elementary Children
Hours 3
Introduction to literacy development, instruction, and assessment for P-6. Foundational concepts of literacy instruction and best-practice are covered. A field component is required.
Prerequisite(s) with concurrency: CEE 320 and CEE 491 and MUE 385

CRD400 Teach Readg Diverse Learn K-12
Hours 3
A foundation in the materials and methods for teaching of reading and language arts K-12, with emphasis on intervention programs, assessment, and instruction for individual and small groups of students. Intensive field experience is required.

CRD412 Impr Read Second Schools
W
Hours 3
Study of methods and strategies for teaching reading at the secondary and junior-college levels. Methods of teaching word attack and comprehension skills are emphasized. Diagnostic techniques, study skills, and teaching reading in the content areas are also covered. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course.
Prerequisite(s): Admission to Teacher Education Program Writing

CRDS10 Expanding Reading
Hours 3
A comprehensive study of the major factors involved in teaching reading at the intermediate grade levels. Techniques for teaching word recognition and comprehension skills are studied extensively.
CRD511 Beginning Reading in Pre-K and Primary Grades
Hours 3
Attends to the theory and practice of beginning reading; key areas of study include diagnostic and evaluative procedures and the organization and implementation of appropriate instruction for P-6. A field component is required.

CRD512 Improving Reading Second Schools
Hours 3
A comprehensive study of the major components involved in literacy instruction at the secondary level. A field component is required. This course should be taken concurrently with the content methods course and CSE 592.

CRD569 Introduction to Literacy Education
Hours 3
This course provides an overview to the foundations of literacy development and instruction grades PK-12.

CRD590 Seminar in Literacy Coaching
Hours 3
A comprehensive study of the major theories and components involved in providing professional development in literacy to teachers and schools.

CRD593 Practicum in Literacy Coaching
Hours 3
This course provides students with the ability to implement the knowledge base of current research in coaching teachers’ literacy instruction by conducting literacy coaching and literacy professional development in P-12 schools.

CRD595 Practicum in Reading
Hours 1-12
Provides graduate students supervised opportunities to apply knowledge and skills in primary grade settings (preschool-2nd).
Prerequisite(s): Corequisites: CRD 510, CRD 511 and CRD 512

CRD653 Foundations of Literacy Education P-12
Hours 3
This course explores multiple theories of literacy from a variety of perspectives and lenses. Additional areas of emphasis include a comprehensive study of the theoretical foundations and the history of literacy development and instruction in PK-12 settings, non-traditional settings (e.g. out of school context(s), and social contexts.
Prerequisite(s): Permission of the instructor.

CRD654 Re-envisioning Reading Assessment and Instruction
Hours 3
Provides advanced study of theoretical perspectives of diagnostic methods and materials for P-12 students at risk of reading failure.

CRD690 Advanced Seminar Crd
Hours 1-3
Provides students with a knowledge base of the relationship between theory, research and practice in regard to K-12 literacy education.

CRD693 Advanced Workshop
Hours 1-3
In-class opportunities to study or work on topics or projects of collective concern. Topics vary. May be repeated.

CRD695 Advanced Practicum Reading Education
Hours 3
Provides graduate students supervised opportunities to apply knowledge and skills in intermediate grade settings (3rd-6th).
Prerequisite(s) with concurrency: CRD 510 and Corequisite: CRD 654

CRD696 Advanced Practicum Reading Specialist Practicum
Hours 3
Provides reading specialist graduate students supervised opportunities to apply knowledge and skills in middle school and high school settings (7th-12th).
Prerequisite(s) with concurrency: CRD 654

CSE390 Instruction Accommodation in Secondary Schools
Hours 3
The course focuses on evaluating teaching and learning behaviors and on general teaching competencies.
Prerequisite(s) with concurrency: CSE 493

CSE401 Technology for Teaching Secondary Mathematics
C
Hours 3
Examines and explores various existing and emerging classroom technologies for specifically teaching secondary mathematics topics including but not limited to spreadsheets, hand-held and computer graphing technologies, dynamic geometry software, computer algebra systems and data collection devices. Fall only. Computing proficiency is required for a passing grade in this course.
Prerequisite(s): C- or better in MATH 227 or MATH 247 and ST 260
Prerequisite(s) with concurrency: MATH 403 and CSE 390

CSE406 Curriculum Secondary Mathematics
W
Hours 3
Future secondary mathematics teachers examine advanced concepts, structures, and procedures that comprise secondary mathematics. This course focuses on current issues and trends in the curriculum, teaching, and learning of secondary mathematics with emphasis on the investigation and implementation of current reform efforts. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course.
Prerequisite(s): C- or better in CSE 401 Admission to Teacher Education Program

Writing

CSE455 Adolescent Literature
Hours 3
Study of contemporary literature for young adults, with emphasis on high-interest and high-quality literature from diverse authors.
CSE469 Pedagogical Grammar
Hours 3
This is a practical course intended to enhance the student's understanding of the structure of the English language. The course is designed to encourage a thorough study of grammar and its role in the English language arts curriculum, to explore the psycholinguistic nature of language processes, and to develop methods of instruction for the classroom.

CSE470 Teaching Writing 6-12
Hours 3
This course is designed to prepare prospective English teachers to successfully teach and evaluate writing in grades 6-12.

CSE476 Improving Science Teaching
C
Hours 3
Examination and evaluation of emerging and existing technologies specific to secondary science teaching. Students will grow their capacity to employ technologies to plan, enact, and assess science teaching and learning. Computing proficiency is required for a passing grade in this course.
Prerequisite(s): CSE 390
Prerequisite(s) with concurrency: BER 450, CRD 412, CSE 489, CSE 486

Computer Science

CSE479 Teach Second Sch English
C, W
Hours 3
Methods and media essential to effective instruction of English in the secondary school. Admission to Teacher Education Program is required. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course.
Prerequisite(s): CSE 390
Prerequisite(s) with concurrency: CSE 489, CRD 412, and BER 450

Computer Science, Writing

CSE480 Teach Sec Sch Forgn Lang
W
Hours 3
Theories, methods, techniques, and essential media for teaching foreign languages effectively in the secondary school. Offered fall semester only. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course. Admission to Teacher Education Program is required.
Prerequisite(s): CSE 390
Prerequisite(s) with concurrency: CSE 489, CRD 412, and BER 450

Writing

CSE483 Teach Second School Math
W
Hours 3
The course presents primarily methods and instructional strategies of teaching mathematics, but necessarily includes a study of selected topics in mathematics. Offered fall semester only. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course. Admission to Teacher Education Program is required.
Prerequisite(s): CSE 406 with a minimum passing grade of C-
Prerequisite(s) with concurrency: CSE 489, CRD 412, BER 450

Writing

CSE485 Teaching Inquiry in Secondary Social Studies
Hours 3
This course is designed to assist students' understanding of and application of powerful, inquiry-based strategies to the design of meaningful 21st century social studies instruction and assessment.
Prerequisite(s): TEP

CSE486 Teach Second Sch Science
W
Hours 3
Instructional strategies and media essential to effective learning of science in the secondary school. Content includes objectives, inquiry teaching, analysis of curricula, assessment, teaching for diversity, science-thinking skills, unit planning, and laboratory management. Offered only fall semester. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course. Admission to Teacher Education Program is required.
Prerequisite(s): None. Corequisite: CSE 489

Writing

CSE487 Teach Second Soc Science
C, W
Hours 3
This course will use a reflective teaching model for examining the history, issues, and contemporary practices related to teaching middle- and high-school social science. Computing proficiency is required for a passing grade in this course. Writing proficiency is required for a passing grade in this course. A student who does not write with the skill normally required of an upper-division student will not earn a passing grade, no matter how well the student performs in other areas of the course. Admission to Teacher Education Program is required.
Prerequisite(s): CSE 390 with a minimum passing grade of C-
Prerequisite(s) with concurrency: BER 450 and CRD 412 and CSE 489

Computer Science, Writing
CSE489 Clinic Exper Second School
Hours 3
Observation and participation experiences in secondary schools. Computing proficiency is required for a passing grade in this course. Admission to Teacher Education Program is required.
Prerequisite(s): CSE 390 Unconditional Admission to Teacher Education Program
Prerequisite(s) with concurrency: Appropriate methods course

CSE493 Diversity Block Seminar
Hours 1-3
A reflective teaching model will be used to explore differences in race, class, gender, and academic achievement as they affect classroom interaction and academic success.
Prerequisite(s) with concurrency: CSE 390

CSE497 Secondary School Teaching
Hours 3-12
Observing and teaching in the student’s secondary school subject area. Admission to Teacher Education Program is required.
Prerequisite(s): CSE 479 or CSE 480 or CSE 483 or CSE 486 or CSE 487 or CIE 480

CSE530 Mod Sec School Program
Hours 3
The evolving secondary school and its program, with emphasis on analysis of current trends that directly affect modern school practices in a societal context.

CSE532 Secondary Sch Curric
Hours 3
The evolving secondary school curriculum, from historical, current trends, and projective perspectives.

CSE555 Adolescent Literature
Hours 3
An introduction to literature appropriate for the adolescent reader; reading patterns and major concerns of adolescents.

CSE563 Improvg English Instr
Hours 3
Principles of learning applied to concepts, skills, attitudes, and problem solving in English and speech; diagnosis, enrichment, remedial teaching, and evaluation.

CSE564 Improvg Soc Sci Instr
Hours 3
Exploration and examination of methods and materials for improving social studies instruction. Focuses on teaching for diverse learners, constructivist methods, critical thinking, interdisciplinary teaching, and various technologies as they apply to secondary social studies classrooms.

CSE565 Improvg Science Instr
Hours 3
Principles of learning applied to concepts, skills, attitudes, and problem solving in science; diagnosis, enrichment, remedial teaching, and classroom evaluation, and application and evaluation of technologies.

CSE566 Principles of Mathematics Education: Teaching, Learning & Curriculum
Hours 3
Principles of learning applied to concepts, skills, attitudes, and problem solving; proper use and evaluation of teaching aids; construction and utilization of teaching instruments; and examination and exploration of alternative assessment strategies and technologies for use in secondary mathematics classrooms.

CSE569 Pedagogical Grammar
Hours 3
Exploration of structural, transformational, and traditional approaches to teaching grammar.

CSE570 Teaching Writing 6-12
Hours 3
This course is designed to prepare prospective and current English teachers to successfully teach and evaluate writing in grades 6-12.

CSE574 Guiding Early Childhood and Elementary Pupil Learning
Hours 3
Focuses on understanding how students learn, what psychological and environmental factors influence learning, and how teachers can facilitate meaningful classroom instructional learning through insights into brain compatible learning, included are theories-to-applications of brain-based learning research to classroom instructional situations in early childhood and elementary education.

CSE575 Principles of Mathematics Education: Tools, Technology, Assessment
Hours 3
This course focuses on the teaching secondary mathematics with the use of new and emerging technologies. It explores the appropriate use of technologies to enhance conceptual understanding and problem solving in mathematics and aims to to develop classroom lessons and assessments for a technology classroom.

CSE576 Improving Science Teaching
Hours 3
Examination and evaluation of emerging and existing technologies specific to secondary science teaching. Students will grow their capacity to employ technologies to plan, enact, and access science teaching and learning.

CSE579 Teach Sec School English
Hours 3
Methods and media essential to effective instruction in English in the secondary school.
Prerequisite(s) with concurrency: CSE 592, CRD 512, BER 550
CSE580 Teach Sec Sch For Lang
Hours 3
Theories, methods, techniques, and essential media for teaching foreign languages effectively in the secondary school. Admission to TEP Program is required.
Prerequisite(s) with concurrency: CSE 592 OR CRD 512

CSE583 Teach Sec School Math
Hours 3
Methods, media, and techniques of teaching mathematics in the secondary school, including selected topics in mathematics and exploration and examination of various technologies for use in secondary mathematics classrooms, including, but not limited to, calculators and various computer software.
Prerequisite(s): CSE 406 with a minimum passing grade of C-
Prerequisite(s) with concurrency: CSE 592, CRD 512

CSE585 Advanced Teaching Inquiry in Secondary Social Studies
Hours 3
This course is designed to assist students' understanding of and application of powerful, inquiry-based strategies to the design of meaningful 21st century social studies instruction and assessment.
Prerequisite(s): TEP

CSE586 Teach Sec School Science
Hours 3
Methods and technologies essential to effective instruction in science in the secondary school.

CSE587 Teach Sec School Soc Sci
Hours 3
Theories and methods of teaching social studies in secondary schools, including examination and exploration of instructional materials, various technologies, constructivist methods, and assessments.

CSE592 Field Work
Hours 1-3
A clinical experience taken concurrently with the methods course and designed to facilitate students' development of pedagogical skills, effective thinking, and professional problem solving.
Prerequisite(s): Unconditional admission to the Teacher Education Program (TEP)

CSE593 Workshop
Hours 1-3
In-class opportunities to study or work on topics or projects of collective concern. Topics vary. May be repeated.

CSE594 Problems
Hours 1-6
Opportunities to study or work independently on topics or projects of individual concern. Credit is based on the nature and degree of student involvement.

CSE595 Practicum
Hours 3-6
Focuses on analysis and performance of teaching strategies and the evaluation of teaching-learning problems.

CSE597 Internship
Hours 3-12
Full-time internship as a teacher in the major teaching field.
Prerequisite(s): CSE 579 OR CSE 580 OR CSE 583 OR CSE 586 OR CSE 587 or CIE 580 OR CIE 582

CSE598 Non-Thesis Research
Hours 1-6
No description available

CSE663 Sec School English
Hours 3
Literature, research, and content in English and speech; current trends; experimental programs; gradation or sequence of subject matter; criteria for program evaluation; and basic issues.

CSE664 Sec Sch Social Science
Hours 3
Focuses on curriculum and research in social studies education, including materials development and current issues in the field.

CSE665 Sec School Science
Hours 3
Literature, research, and content in science; current trends; experimental programs; gradation of subject matter; criteria for program evaluation; and basic issues.

CSE666 Sec School Mathematics
Hours 3
Principles of learning applied to concepts, skills, attitudes, and problem solving; proper use and evaluation of teaching aids; construction and utilization of teaching instruments; and examination and exploration of alternative assessment strategies and technologies for use in secondary mathematics classrooms.

CSE670 Res & Theory In Sec Ed
Hours 3
An examination of the relationship between theory and research. Students learn to search and evaluate the research literature and develop a proposal for research.

CSE675 Imprvg Math Teaching w/Tech
Hours 3
Focuses on the implementation, refinement, and assessment of mathematics teaching using advanced and new technologies including advancing critical thinking and cognitive task levels of classroom mathematics instructions.

CSE670 Res & Theory In Sec Ed
Hours 3
An examination of the relationship between theory and research. Students learn to search and evaluate the research literature and develop a proposal for research.

CSE675 Imprvg Math Teaching w/Tech
Hours 3
Focuses on the implementation, refinement, and assessment of mathematics teaching using advanced and new technologies including advancing critical thinking and cognitive task levels of classroom mathematics instructions.
CSE694 Advanced Problems
Hours 1-6
Opportunities to study or work independently on topics or projects of individual concern. Credit is based on the nature and degree of student involvement.

CSE695 Practicum
Hours 1-12
Supervised opportunities to apply knowledge and skills in a professional setting. Credit is based on the nature and degree of student involvement.

CSE697 Specialist Degree Res
Hours 1-6
Systematic classroom inquiry is used to engage students in a teacher action research project. Advisor recommendation required.
Prerequisite(s): CSE 670

CSE698 Non-Thesis Research
Hours 1-3
No description available

CSE699 Dissertation Research
Hours 1-12
This independent research course partially fulfills required research dissertation hours toward the doctoral degree. The course is conducted under the guidance of the dissertation advisor. Material covered will be of an advanced nature aimed at providing doctoral students with an understanding of the latest research and current developments within the field. Discussion and advisor guidance will be directed towards readings of research articles and development of research methodology.