

Education (ED)

ED 500 - SPECIAL TOPICS IN EDUCATION

Semester Hours: 1-3

Independent study, special projects, and special in-service programs.

ED 501 - INTRODUCTION TO EDUCATION PRACTICUM

Semester Hours: 0

Initial practicum experience designed to provide the opportunity to explore the role of the classroom teacher in today's diverse school settings. Required for graduate students receiving their initial certification.

ED 510 - FOUNDATIONS OF LITERACY

Semester Hours: 3

This course includes a study of methods, materials, and strategies for reading instruction. Components of the course will include but not be limited to the five pillars of reading instruction identified by the National Reading Panel (2000): phonemic awareness, phonics, fluency, vocabulary, and comprehension. Emphasis is placed on the various stages of and approaches to literacy development, knowledge of which is required for the Alabama Reading Specialist licensure.

ED 513 - LITERATURE FOR CHILDREN AND ADOLESCENTS

Semester Hours: 3

Course content will include the study of various genres of children's and adolescent literature and their relationship to beginning reading, enhancement of reading comprehension, and intervention instruction in the various content areas. (Same as EH 613) Must be admitted to the Teacher Education Program.

ED 520 - COMPUTER BASED INSTRUCTIONAL TECHNOLOGY

Semester Hours: 3

Introduces prospective teachers to current state of the art in educational technology. Extensive hands-on experiences with microcomputers and other emerging technology. Emphasis on effectively integrating technology into instructional setting for both special and regular students.

ED 521 - SECONDARY ELA INSTRUCTION WRITING TO READ

Semester Hours: 2-3

Candidates explore the ways they can use specific writing-to-learn activities to enhance their students' capacity to understand a variety of complex texts. Candidates will learn techniques for engaging students in the questioning, inference-making, syntactical pattern recognition, and meaning-making of both fiction and nonfiction works.

ED 522 - MIDDLE AND SECONDARY SCHOOL MATHEMATICS METHODS

Semester Hours: 2-3

This course is part one in a series of two courses that are designed for teacher candidates who are pursuing teaching certification who are pursuing teaching certification in middle and/or secondary mathematics. This methods course provides background for middle school and secondary teaching from the perspective of theory, research, and practice.

ED 523 - TEACHING SCIENCE IN MIDDLE AND SECONDARY SCHOOLS I

Semester Hours: 2-3

This course will focus on how secondary students learn science. Candidates will learn how to develop and design developmentally appropriate lessons in which their students are able to make observations, examine relationships, notice patterns, and make inferences, while confronting naive misconceptions. Candidates will discuss the nature of science (NOS).

ED 524 - TEACHING SOCIAL STUDIES IN MIDDLE AND SECONDARY SCHOOLS I

Semester Hours: 2-3

This course teaches research-based techniques and strategies employed by social science teachers at the secondary levels. As well as learning theoretical foundations and the goal of social science instruction (citizenship skills), students will learn pedagogic skills, instructional strategies, and modes of reasoning unique to the social studies classroom.

ED 530 - APPLIED MULTICULTURALISM

Semester Hours: 3

Through an examination of constructs such as race, ethnicity, social class, gender, sexual orientation, and religious affiliation, students will develop an understanding of the connections between identity, difference, power, and privilege and the role(s) school (could/should) play in perpetuating or ending discriminatory practices. Furthermore and more importantly, students will develop an understanding of the ways research in both the humanities and social sciences can be used to interpret, analyze, and critique multiculturalism. Students will leave the course with research-based pedagogical practices designed to help all students learn to the best of their abilities.

ED 531 - SECONDARY ELA INSTRUCTION READING TO WRITE

Semester Hours: 2-3

In this course, candidates will explore the ways they can use specific reading activities to enhance their students' ability to express themselves in multiple registers and forms of discourse. Candidates will learn techniques for engaging students in the process of developing and expressing their ideas while demonstrating and improved command of the grammatical, syntactical, and discursive elements of language.

ED 532 - SPACE ORIENTATION FOR TEACHERS

Semester Hours: 3

A weeklong course at the U.S. Space and Rocket Center in Huntsville, Alabama for pre-service and in-service teachers. The inquiry based workshops are taught around the theme of space exploration include activities to be done across the curriculum. All activities are correlated to National Math, Science, Technology, Social Studies, and Reading Standards. Activities based on curriculum developed by NASA, CAP, NSATA, and the USSRC. Topics include moon, mars, rocketry, propulsion, hydroponics, math, biology, history and literature.

ED 533 - TEACHING SCIENCE IN MIDDLE AND SECONDARY SCHOOLS II

Semester Hours: 2-3

Students will discuss the status of science education in our nation's schools, and the need for implementing research-based strategies in the classroom using the 5E learning cycle as framework.

ED 534 - TEACHING SOCIAL STUDIES IN MIDDLE AND SECONDARY SCHOOLS II

Semester Hours: 2-3

This methods course is designed to study effective techniques and strategies employed by social science teachers at the middle and secondary levels. As well as learning theoretical foundations in social studies education, students will learn pedagogic skills, instructional strategies, and modes of reasoning unique to the social studies classroom.

ED 535 - INTRODUCTION TO APPLIED EDUCATIONAL RESEARCH

Semester Hours: 3

Introduction to the nature of research and its relationship to educational thought and practice. Primary focus will be on planning and executing research activities (i.e. action research, thesis development) in the diverse classroom and analyzing the collected data to improve instruction, educational performance, and adding to the body of knowledge in educational practices.

ED 539 - TEACHING REASONING AND PROOF IN SECONDARY MATHEMATICS

Semester Hours: 2-3

This methods course provides background for middle school and secondary teaching from the perspective of theory, research, and practice. It is designed to provide an introduction to and practice in ways in which to encourage students in mathematical reasoning and proof.

ED 540 - COGNITIVE DEVELOPMENT THEORIES OF LEARNING

Semester Hours: 3

The course is designed to inform students about recent developments in Cognitive Psychology and their implications for teaching and learning. Students will leave the course with a variety of "cognitive understandings" for use in differentiated classrooms.

ED 545 - CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOLS

Semester Hours: 3

This course is designed to address various contemporary teaching and learning strategies, as well as related issues, assessments strategies, and applicable theories related to secondary teaching and learning.

ED 560 - CURRICULUM AND EMERGING INSTRUCTIONAL TECHNOLOGY

Semester Hours: 3

Designed to build competency in computer technologies appropriate to instructional use. Concepts of authoring and scripting will be used to unify course materials. (Same as CS 560.)

ED 565 - INTRODUCTION TO DIFFERENTIATED INSTRUCTION

Semester Hours: 3

The course provides an introduction to the philosophy and practice of differentiation. Students will examine the elements, content, process, product, affect and environment by which instruction can be differentiated to address the complex challenges of meeting the diverse learning needs of all students.

ED 570 - DIFFERENTIATED INSTRUCTION FOR SPECIAL POPULATIONS

Semester Hours: 3

The course provides practical strategies to maximize learning for all students, particularly those with disabilities, gifted/talented, and English language learners (ELL).

ED 575 - READING IN THE PRIMARY GRADES

Semester Hours: 3

An introduction to the basic principles of literary instruction in culturally and linguistically diverse primary grade classrooms, including theoretical bases for instruction, methods of instruction and organization, developmentally appropriate strategies and materials, and assessment of children's literacy. Class activities include mini-lessons, discussions, group activities, and presentations. An intensive school-based practicum in grades preK-2 is required.

ED 580 - PROJECT BASED LEARNING

Semester Hours: 3

Develop a robust understanding of Project Based Learning (PBL) through critiquing, evaluating, and synthesizing PBL's core theoretical concepts.

ED 593 - EDUCATING EXCEPTIONAL CHILDREN AND YOUTHS

Semester Hours: 3

Introduction to the field of exceptional children and youth, including observations. This course, or equivalent, is a prerequisite to certification. Intensive field experience required.

ED 600 - SPECIAL PROBLEMS IN EDUCATION

Semester Hours: 1-3

Independent study, special projects, and in-service programs.

ED 604 - CONTRIBUTIONS IN PSYCHOLOGY TO EDUCATION

Semester Hours: 3

Principles, theory, and practice of psychology for teaching and administrative service in educational institutions. Factors that determine learning and conditions of effective teaching. Administrator and supervisor as organizer of the milieu wherein teaching, learning, and growth occur. Intensive field required.

ED 605 - REACHING RESEARCH AND INSTRUCTION

Semester Hours: 3

Elements of effective reading instruction for beginning readers as supported by current research and practice. Topics include balance, language-rich/print-rich environment, language development, phonemic awareness, print awareness, phonics, writing, spelling, and comprehension. Intensive field experience required.

ED 607 - EDUCATIONAL LEADER AS THE EVALUATOR

Semester Hours: 3

Procedures and techniques of evaluation and research approaches. Emphasis on teachers as evaluators; based on action research in the classroom. Intensive field experience required.

ED 608 - EXPANDING READING ABILITY IN THE CONTENT AREA

Semester Hours: 3

Strategies to enhance reading comprehension when using materials in all subject areas. Teacher directed, integrated instruction; extensive use of authentic printed materials; discussion at literal and higher levels of understanding, motivation, vocabulary, and writing. Intensive field experience required.

ED 609 - CLASSROOM AND BEHAVIOR MANAGEMENT

Semester Hours: 3

A focus on the variety of instructional management options to meet classroom and individual student needs to ensure success in school is integrated throughout all course activities. A range of management practices, including strategies for diverse and special populations is offered. Theoretical and reflective practices are incorporated during classroom meetings. Students will observe, research, and discuss current classroom approaches. After reflections, effectiveness of observed practices will be assessed. Student will discuss and develop alternative activities that promote successful management techniques. Intensive field experience required. Admission to the Teacher Education program or permission of chair is required for this class.

ED 610 - TEACHING FINE ARTS IN THE ELEMENTARY SCHOOL

Semester Hours: 2-3

This course covers multiple aspects of fine arts education including the use of content, functions, and achievements of the performing arts (dance, music, theatre) and visual arts as primary media for communication, inquiry, and engagement among elementary students.

ED 612 - DIAGNOSIS AND ASSESSMENT OF READING

Semester Hours: 3

Focuses on ways to address the needs of students who do not read at grade level. Intervention strategies such as on-going assessment and evaluation, explicit instruction in phonemic awareness and phonics, extensive practice, comprehension strategies, and writing, along with careful examination of standardized state assessment measures. Intensive field experience required.

ED 615 - READING IN THE INTERMEDIATE GRADES

Semester Hours: 3

This course provides an in-depth study in and application of the process of reading and reading instruction, theoretical approaches, instructional strategies, classroom organization, and the formal/informal assessment of reading in intermediate grades. This course is required of all elementary education majors and secondary education candidates who are pursuing a middle school endorsement. Intensive field experience required.

Prerequisites: Admission to the Teacher Education Program.

ED 620 - USING TECHNOLOGY FOR SPECIAL POPULATIONS

Semester Hours: 3

Prepares teachers to plan curriculum integration by using computer technology and software in various curriculum areas for both regular and special students. Students will develop competency in instructional design and production skill techniques and implement instructional events using long-distance technologies.

ED 635 - USING ASSESSMENT TO GUIDE DIFFERENTIATED INSTRUCTION

Semester Hours: 3

The focus of this course would be to use a variety of norm-referenced, criterion-referenced and other assessment data to inform instruction for a diverse classroom within the RTi model. Students would learn to use formative and summative assessments to determine the type of strategies needed to teach content.

ED 650 - DIFFERENTIATING ELEMENTARY MATHEMATICS AND SCIENCE INSTRUCTION

Semester Hours: 3

This course will focus on guiding the learner to apply the concepts of differentiated instruction within mathematics and science contexts. Participants will learn how to implement effective strategies for managing flexible groups, acquire ideas for providing students with a variety of options to successfully target mathematics and science standards and understand how to plan strategically in order to reach the needs of diverse learners within the classroom through inquiry-based learning.

ED 665 - DIFFERENTIATING ELEMENTARY LITERACY (READING AND WRITING INSTRUCTION)

Semester Hours: 3

This course will focus on guiding the learner to apply the concepts of differentiated instruction to elementary literacy concepts. Advanced teacher candidates will develop and implement differentiated instructional plans that utilize individual and flexible grouping strategies and resources to support the growth of strategic, independent readers and writers.

ED 671 - TEACHING ELEMENTARY LANGUAGE ARTS

Semester Hours: 3

Introduction to current practices in language arts instruction with emphasis on the development of an integrated curriculum using children's literature as a foundation. Includes appropriate techniques for teaching of grammar, spelling, and handwriting. Intensive field experience required. Prerequisites: Admission to the Teacher Education Program.

ED 672 - TEACHING ELEMENTARY SOCIAL STUDIES

Semester Hours: 3

Teaching social studies in grades K-6. Helping beginning teachers acquire background skills in organizing and teaching units of work. Intensive field experience required. Prerequisites: Admission to the Teacher Education Program.

ED 673 - TEACHING NATURAL AND HEALTH SCIENCE

Semester Hours: 3

Integrates concepts from reflective practice with elementary science teaching. Opportunity to refine teaching skills in the planning, implementation, and evaluation of science lessons and units of instruction. Intensive field experience required. Prerequisites: Admission to the Teacher Education Program.

ED 674 - TEACHING ELEMENTARY MATHEMATICS

Semester Hours: 3

Overview of the mathematics concepts and skills taught in grades K-6 with an emphasis on the principles, methods, and materials used in the teaching and evaluation of elementary school mathematics. Focuses on the attitudes and behaviors of students and teachers in the actual planning and implementation of mathematics instruction for an elementary school classroom. Intensive field experience required. Prerequisite: Admission to the Teacher Education Program.

ED 690 - MASTER'S ACTION RESEARCH PROJECT

Semester Hours: 3

The capstone course will serve as a mechanism to support the research, methodology, development, and experimental stages of the required action research. The student's work will be approved and supervised by a selected faculty advisor with direct connections to the research area. A symposium in which students present their research report will be culminating activity.

ED 691 - PORTFOLIO SEMINAR & SYMPOSIUM

Semester Hour: 1

The seminar will provide a forum in which the student's culminating portfolio is refined and submitted for faculty review. The seminar will also serve as a mechanism to support the final writing stages of the required action research project or case study report. The student's work will be approved and supervised by the faculty advisor(s). A symposium in which students present their research will be the culminating activity.

ED 692 - ADVANCED P-12 INTERNSHIP

Semester Hours: 3

This internship is for students in advanced programs. The internship is completed throughout the program with a culminating portfolio of all internship assignments.

ED 693 - ELEMENTARY INTERNSHIP

Semester Hours: 6

Observation, participation and teaching in elementary school (full time, 15 week semesters). Students will also attend campus-based seminars designed to meet specific needs of the interns.

ED 696 - P-12 INTERNSHIP

Semester Hours: 3-6

ED 698 - HIGH SCHOOL INTERNSHIP

Semester Hours: 3-6

Observation, participation, and teaching in middle/high school (full-time, 15 week semester). Students will also attend campus based seminars designed to meet specific needs of interns.