EDSC 4440 Teaching Internship in Secondary English 9(27) Interns design, implement, and critically reflect upon instructional units and teaching practices in supervised secondary English classes. Interns must provide evidence of performance that meets national and state teaching standards for secondary English. Taught spring semester only. Prep: EDSC 4240. Coreq: EDSC 4540.


EDSC 4500 Secondary English Capstone Seminar 3(2) Seminar in conjunction with EDSC 4440. Intensive reflects upon and solves problems regarding teaching events, share effective teaching practices, and devise ways to document dimensions of effective teaching. Taught spring semester only. Prep: EDSC 4240. Coreq: EDSC 4440 and EDSC 4541.

EDSC 4540 Secondary English Capstone Seminar Laboratory 0(3) Non-credit laboratory to accompany EDSC 4540. Coreq: EDSC 4540.


EDSC 4561 Secondary Mathematics Capstone Seminar Laboratory 0(3) Non-credit laboratory to accompany EDSC 4560. Coreq: EDSC 4560.


EDSC 4571 Secondary Science Capstone Seminar Laboratory 0(3) Non-credit laboratory to accompany EDSC 4570. Coreq: EDSC 4570.


EDSC 4581 Secondary Social Studies Capstone Seminar Laboratory 0(3) Non-credit laboratory to accompany EDSC 4580. Coreq: EDSC 4580.

EDSC (BIOL) 4820* Laboratory Techniques for Teaching Science 3(1) Focuses on basic lab skills needed to plan, prepare, and conduct inquiry-based laboratories and to familiarize preservice teachers with a variety of scientific equipment and their methodologies. Topics include ways to integrate technology into the classroom, lab safety, and the development of inquiry-based classroom activities. Prep: BIOL 1040 and BIOL 1060; or BIOL 1110. Coreq: EDSC 4821. May also be offered as BIOL 4820.

EDSC (BIOL) 4821* Laboratory Techniques for Teaching Science Laboratory 0(3) Non-credit laboratory to accompany EDSC 4820. Coreq: EDSC 4820. May also be offered as BIOL 4821.

EDSC (ENGL) 4850* Composition and Language Studies for Teachers 3(3) Examines the principles and practices of composing and teaching composition. Includes a historical study of English language with attention to phonology, morphology, syntax, semantics, and practical aspects of language grammars. Serves as a practicum in composing and assessing processes, collaborative learning, writers purposes, audience expectations, and language conventions. May also be offered as ENGL 4850. Prep: ENGL 3100.

SPECIAL EDUCATION

Professors A. Katsiyannis, P.M. Stecker; Associate Professors M.J. Hodge, J.B. Ryan; Assistant Professors R. Ennis, J. Farmer, S.M. M.ackiewicz; Clinical Faculty B. Romansky

EDSP 3700 Introduction to Special Education 3(3) Survey of students with disabilities and with gifts/talents. Individuals with Disabilities Education Act is emphasized, including general educator's role in serving students with special needs. Characteristics, assessment, and effective instructional procedures for students of varying exceptionalities are addressed. Includes Honors sections. Students must have a minimum grade point average of 2.0 to enroll in this course.

EDSP 3720 Characteristics and Instruction of Individuals with Learning Disabilities 3(3) In-depth coverage of characteristics and identification procedures for individuals with learning disabilities. Effective instructional strategies are addressed. Students participate in field experiences throughout the semester. Offered fall semester only. Prep: EDSP 3700. Coreq: EDSP 3720 and EDSP 3740.

EDSP 3721 Characteristics and Instruction of Individuals with Learning Disabilities Laboratory 0(1) Non-credit laboratory to accompany EDSP 3720. Coreq: EDSP 3740.

EDSP 3731 Characteristics and Instruction of Individuals with Intellectual Disabilities and Autism Laboratory 0(1) Non-credit laboratory to accompany EDSP 3730. Coreq: EDSP 3730.

EDSP 3740 Characteristics and Strategies for Individuals with Emotional/Behavorial Disorders 3(3) In-depth coverage of characteristics and identification procedures for individuals with emotional or behavioral disorders. Effective instructional strategies and behavior management are addressed. Students participate in field experiences throughout the semester. Prep: EDSP 3700; and admission to professional level. Coreq: EDSP 3720 and EDSP 3741.

EDSP 3741 Characteristics and Strategies for Individuals with Emotional/Behavorial Disorders Laboratory 0(1) Non-credit laboratory to accompany EDSP 3740. Coreq: EDSP 3740.

EDSP 3750 Early Intervention Strategies for Young Children with Special Needs 3(3) Provides students with a working knowledge of the history and legal precedence for providing early intervention services, the characteristics of young children with special needs and their families, and effective instructional techniques for working with this population. Students participate in field experiences throughout the semester. Coreq: EDSP 3751.

EDSP 3751 Early Intervention Strategies for Young Children with Special Needs Laboratory 0(1) Non-credit laboratory to accompany EDSP 3750. Coreq: EDSP 3750.

EDSP 4900 Teaching Writing to Students with Disabilities 1(1) Prepares students to deliver writing instruction and to administer curriculum-based assessments. Effective instructional strategies for individuals with disabilities in the areas of written expression, writing mechanics and spelling are addressed. Prep: EDSP 4910 and admission to the professional level. Coreq: EDSP 4920 and EDSP 4930 and EDSP 4940 and EDSP 4960 and EDSP 4970.

EDSP 4910 Educational Assessment of Individuals with Disabilities 3(2) Introduction to assessment process (verification) in special education. Includes procedural safeguards; data collections via informal and standardized procedures; issues in assessment; psychometric properties of standardized tests; and administration, scoring, and interpretation of selected instruments. Offered spring semester only. Prep: EDSP 3720 and EDSP 3740; and admission to the professional level. Coreq: EDSP 3730 and EDSP 4911.

EDSP 4911 Educational Assessment of Individuals with Disabilities Laboratory 0(2) Non-credit laboratory to accompany EDSP 4910. Coreq: EDSP 4910.

EDSP 4920 Mathematics Instruction for Individuals with Mild Disabilities 3(3) Prepares students to provide explicit instruction in mathematics for individuals with mild disabilities. Students learn to assess, analyze and teach math skills systematically. Offered fall semester only. Prep: EDSP 4910; and admission to the professional level. Coreq: EDSP 4900 and EDSP 4930 and EDSP 4940 and EDSP 4960 and EDSP 4970.
EDSP 4930 Classroom and Behavior Management for Special Educators 3(3) Students describe various intervention strategies for increasing and maintaining appropriate behaviors and for decreasing or eliminating inappropriate behaviors. Students accurately recognize, record, and chart inappropriate behaviors; employ the least restrictive intervention; foster self-management skills; and develop preventive strategies and classwide systems for managing academic and social behavior. Offered fall semester only. Preq: EDSP 4910; and admission to the professional level. Coreq: EDSP 4900 and EDSP 4920 and EDSP 4940 and EDSP 4960 and EDSP 4970.

EDSP 4940 Teaching Reading to Students with Mild Disabilities 3(3) Emphasizes the knowledge and skills necessary for teaching reading to students with mild disabilities. Offered fall semester only. Preq: EDSP 4910; and admission to the professional level. Coreq: EDSP 4900 and EDSP 4920 and EDSP 4930 and EDSP 4960 and EDSP 4970.

EDSP 4950 Communication and Collaboration in Special Education 3(3) Focuses on effective communication skills for preservice special education teachers to encourage collaboration among relevant stakeholders and improve outcomes for individuals with disabilities. Preq: EDSP 4960. Coreq: EDSP 4980.

EDSP 4960 Special Education Field Experience 3 (9) Supervised practical experience prior to Directed Teaching for preservice special education teachers preparing to teach individuals with mild/moderate disabilities. Offered fall semester only Preq: EDSP 4910; and admission to the professional level. Coreq: EDSP 4900 and EDSP 4920 and EDSP 4930 and EDSP 4940 and EDSP 4960.

EDSP 4970 Secondary Methods for Individuals with Disabilities 3(3) Preparation for working with students with mild/moderate disabilities in secondary schools. Focus is on literature, methods, and materials for providing instruction in transition, self-determination, knowledge within content areas, functional skills, and integration into the community. Offered fall semester only. Preq: EDSP 4910; and admission to the professional level. Coreq: EDSP 4900 and EDSP 4920 and EDSP 4930 and EDSP 4940 and EDSP 4960.

EDSP 4980 Directed Teaching in Special Education 12(34) Comprehensive course providing a full-time, semester-long experience for preservice special education teachers who plan to teach individuals with mild/moderate disabilities. Generally the last course in the program; provides teaching experience under the supervision of University and school personnel. Offered spring semester only. Preq: EDSP 4960 Coreq: EDSP 4950.

ENVIRONMENTAL ENGINEERING AND SCIENCE

EES 1000 Introduction to the Field of Environmental Engineering 1(3) Introduction to the field of environmental engineering. Topics include the environmental engineering profession, description of environmental engineering functions, and career opportunities. Preq: PHYS 1110 and MATH 1080, each with a C or better. Coreq: EES 3010.

EES 2020 Environmental Engineering Fundamentals I 3(3) Overview of topics and techniques useful in the study of environmental engineering. Emphasis is given to development of oral and written communication skills needed by the engineering professional and application of fundamental principles to environmental systems. Preq: CH 1010 and ENGR 1070 and MATH 1080, each with a C or better. Coreq: EES 3010 and EES 3040.


EES 3000 Honors Seminar: Introduction to Research in Environmental Engineering 1(1) Provides an introduction to environmental engineering research. Students attend seminars describing how a research program is developed, including the scientific method and hypothesis testing. Students are expected to write and revise a research proposal, which is reviewed by the faculty advisor. Preq: Consent of instructor and membership in Calhoun Honors College.

EES 3010 Honors Research in Environmental Engineering 3 (9) In this portion of the undergraduate honors research program in environmental engineering, students begin their environmental engineering research project. Preq: EES 3000 and consent of instructor and membership in the Calhoun Honors College.

EES 3030 Water Treatment Systems 2(2) Study of fundamentals, rational design considerations, and operational procedures of the unit operations and processes employed in water treatment. Introduces the integration of unit operations and processes into water treatment systems. Preq: EES 2020 with a C or better. Coreq: EES 3030 and EES 3050.

EES 4000 Honors Research in Environmental Engineering II 3 (9) Continuation of EES 3010. Students continue research work on their honors environmental engineering project. Preq: EES 3010 and consent of instructor and membership in the Calhoun Honors College.

EES 4010 Environmental Engineering Fundamentals II Laboratory 3(3) Laboratory exercises accompany EES 4100 and EES 4110. Non-credit laboratory to accompany EES 4100 and EES 4110. Each with a C or better. Coreq: EES 3030 and EES 3040.

EES 4020 Water and Waste Treatment Systems 3(3) Study of fundamental principles, rational design considerations, and operational procedures of the unit operations and processes employed in water and wastewater treatment systems. Both physicochemical and biological treatment techniques are discussed. Introduces the integration of unit operations and processes into water and wastewater treatment systems. Preq: EES 2020 or EES 4010.

EES 4030 Environmental Radiation Protection I 3(3) Fundamental principles of radiological health and radiation safety. Topics include radiation fundamentals, basic concepts of environmental radiation protection, internal and external dosimetry, environmental dose calculations and radiation protection standards. Preq: PHYS 2210 with a C or better. Coreq: EES 4110.

EES 4100 Environmental Radiation Detection and Measurement Laboratory 2(2) Laboratory exercises in environmental radiation detection and measurements. Topics include fundamental principles of radiation detection and measurement; topics include nuclear electronics, counting statistics, radiation interactions, basic gas, scintillation, and semiconductor detectors; gamma-ray spectroscopy; health physics survey instrumentation; and thermoluminescent dosimetry. Preq: EES 4100. Coreq: EES 4111.

EES 4110 Environmental Radiation Detection and Measurement Laboratory 3(3) Non-credit laboratory to accompany EES 4110. Coreq: EES 4110.