

COURSE DESCRIPTIONS

Courses numbered at the 500 level are graduate, non-degree courses. Courses with the 600-level designation are classes offered at the master's level and, as applicable, count toward specific requirements within identified graduate-degree programs. Courses at the 700 level are intended for individuals who have completed the master's degree and are seeking advanced professional opportunities.

BIOLOGY COURSES

BIOL 605 **TOPICS IN BOTANY (4)** Focuses on aspects of plant biology emphasized in K-12 curricula. Plant life cycles, functional anatomy, photosynthesis, ecology, and other topics as appropriate will be examined in detail. Laboratory experiences and projects provide students with opportunities to design and present educational activities adaptable to the classroom.

BIOL 610 **HISTORY AND PHILOSOPHY OF MODERN BIOLOGY (2)** An exploration of the history and philosophy of the biological sciences focused on development of modern biological thought built from the seventeenth-century ideas of Bacon, Descartes, Newton, and others through late-twentieth century including the ideas of Darwin, Mendel, Pasteur, into the molecular revolution sparked by Watson and Crick and their contemporaries. Coursework revolves around discussion of primary works by these and related individuals and supported by additional interpretations from various texts.

BIOL 620 **HUMAN ANATOMY (3)** A cadaver-based study of human anatomy focusing on learning human anatomical terminology, and interrelationships of bones, joints, muscles, nerves, and blood supply to all regions of the human body, using dissected human cadavers, digital human dissection simulations, digital and text images, and structural models.

BIOL 623 **APPLIED GENETICS (3)** Basic concepts and principles of prokaryotic and eukaryotic genetics is discussed, including Mendelian inheritance, polygenic inheritance, linkage and mapping, chromosome aberrations, population genetics, DNA structure and replication, gene expression, mutation, gene regulation, recombinant DNA technology, and the molecular basis of disease. Special emphasis is placed on improving laboratory skills of biology teachers at middle and high school levels.

BIOL 630 **PHYSIOLOGY: CELLS TO FUNCTION (3)** Exploration of the cellular basis of physiological function in vertebrates, primarily humans. Case studies and past/present clinical examples are frequently used.

COUNSELING COURSES

COUN 601 **COUNSELOR PROFESSIONAL IDENTITY, FUNCTION, AND ETHICS (3)** Overview of the counseling profession and the critical, ethical, and legal issues that face counselors, with emphasis on relationship of professional organizations to counselor function and identity.

COUN 630 **MARRIAGE AND FAMILY COUNSELING (3)** *Prerequisite: EDHD 602, COUN 620.* Overview of several theoretical constructs and approaches to family therapy, including a study of the structural school, systems approaches, Bowen's theory of family systems, and the contributions of Alfred Adler. Topics include sexual dysfunctions, divorce, sexual assault, and families of poverty.

COUN 635 **ADVANCED APPLICATIONS IN GROUP WORK (3)** *Prerequisite: COUN 620.* This course builds on the principles and skills taught in COUN 620 by giving students the opportunity to co-lead an Adlerian-based parent education group under the supervision of the course instructor and an area counseling professional. Emphasis is on the synthesis of group counseling theory through direct experience leading a group and on the mastery and application of the parenting skills utilized for work with families in any counseling setting.

COUN 640 **ABNORMAL BEHAVIOR (3)** An examination of behavioral deviations, determining factors, and approaches to treatment and prevention.

COUN 645 **ADDICTION COUNSELING (3)** A study of the incidence, causes, and problems related to substance abuse, along with examination and evaluation of prevention and treatment strategies.

COUN 650 **ADMINISTRATION AND SUPERVISION OF MENTAL HEALTH AGENCIES (3)** Examination of approaches to the administration of mental health programs and of the supervision of mental health agencies' personnel. Attention is given to management of human resources, budgeting, and evaluation of personnel and programs.

COUN 655 **ADVANCED PROFESSIONAL DEVELOPMENT IN COUNSELING (3)** An advanced exploration of recent developments impacting the provision of professional counseling services. Emphasized topics include monitoring changes in private and public funding structures, developing strategies for establishing an independent private practice, navigating courtroom testimony, expanding consultative roles, and advanced diagnostics and treatment planning.

COUN 665 **CROSS-CULTURAL COUNSELING (3)** Examination and application of counseling strategies appropriate for culturally diverse clients; focuses on the need for counselors to examine their own feelings and attitudes toward diverse populations.

COUN 669 **SPECIAL TOPICS IN COUNSELING (1, 2, 3)** Intensive study of a problem or topic in counseling. Topic varies according to professor and term offered.

COUN 670 **LEGAL AND ETHICAL ISSUES IN COUNSELING (3)** An in-depth examination of the major legal and ethical issues facing the counseling profession. Extensive work with case studies is included.

COUN 675 SUPERVISION OF COUNSELING (3) A study of the supervision of counseling through an integrated lesson and field experience as a supervisor trainee. Enrollment is by permission of the instructor only and is available for post-M.Ed. students seeking professional counselor license.

COUN 683 DYNAMICS OF PLAY (3) Examination of the theoretical, practical, and therapeutic aspects of play in relation to the development of young children. Emphasis is placed on theories and techniques of child-centered play therapy and its use in a variety of settings. The course is appropriate for both counselors and teachers and is available to post-M.Ed. students seeking professional counselor license.

COUN 685 ADVANCED COUNSELING TECHNIQUES, DIAGNOSIS, AND TREATMENT PLANNING (3) Examination and application of counseling techniques and psychoeducational interventions common to the skilled/advanced practitioner. Advanced training in the areas of diagnosis and treatment planning and special emphasis is devoted to clients with more than one presenting disorder or emotional concern.

COUN 690 CONTEMPORARY ISSUES AND PRACTICES IN MARRIAGE AND FAMILY COUNSELING (3) *Prerequisites: COUN 614/615, COUN 630, EDHD 602.* This course builds on the principles covered in COUN 630 and is designed for graduate students interested in pursuing marriage and family counseling as a possible career. Strategies are presented and discussed about ways to handle major challenges to marriages and families such as substance abuse, eating disorders, infidelity, creating step-families, and child discipline. The course focuses on role playing within the course as well as on direct experience working with couples considering marriage or with couples who have encountered early challenges in their relationships.

COUN 695 INDEPENDENT STUDY (1, 2, 3) Provides for pursuit of individual interest and projects not covered in existing courses.

COUN 699 COUNSELING INTERNSHIP (3, 6) *Prerequisites: COUN 601, COUN 605, COUN 614, COUN 615, COUN 620, COUN 630.* Intensive, semester-long, counseling internship in an agency or school setting and under close supervision. The internship is a full-time experience.

CURRICULUM AND INSTRUCTION COURSES

EDCI 600 CLASSROOM MANAGEMENT AND INSTRUCTIONAL METHODOLOGY (3) Focuses on research-based, scientifically-validated strategies for teaching, managing, and motivating students in classrooms and the schools. The course assists with the conceptualization, measurement, and improvement of classroom performance and management for grades K-12, in order to effectively impact, assess, and improve instruction and student academic performance and behavior.

EDCI 606 **EFFECTIVE INSTRUCTIONAL STRATEGIES (3)** Focuses on research-based, scientifically-validated strategies for teaching students in the schools. The course assists with the conceptualization, measurement, and improvement of classroom performance and management for grades K-12 and features a variety of organizational patterns and practices, approaches to instruction and their impact on students' learning, and instruments for evaluating teacher behavior in specific contexts.

EDCI 616 **CURRICULUM AND SCHOOLING IN CONTEMPORARY SOCIETY (3)** This course is designed to assist educational leaders and teachers in the decision-making processes necessary to implement a standards-based curriculum and a formative and summative assessment process of curricular initiatives. The course emphasizes historical, philosophical, sociological, and legal foundations of public education. A major emphasis is placed on contemporary curricular issues and innovations, as well as school culture.

EDCI 661 **INSTRUCTIONAL STRATEGIES FOR SCHOOL MATH (3)** Focuses on the emerging goals, principles, and practices of contemporary mathematics education, addressing the rationale for change, relevant research and theory, and the resulting recommendations for improving mathematics learning among all students. Specific topics include curriculum, instructional materials and methodologies, assessment, diagnostic and remediation strategies, and the teacher's role in improving student learning.

EDCI 676 **SEMINAR IN INSTRUCTIONAL LEADERSHIP (3)** Refines understanding of the role of teacher as a constructive leader in today's schools. A capstone course, it focuses on new role responsibilities and expectations for teachers as participatory decision makers in school-based change initiatives.

EDCI 686 **METHODS OF SCIENCE TEACHING (3)** A workshop-approach modeling recommended practices for teaching science as outlined by the National Science Education Standards. Curriculum topics are consistent with the endorsement levels of the students enrolled.

EDCI 690 **PRINCIPLES OF LEADERSHIP (3)** Emphasizes the study of leadership theories as they relate to PK-12 education, higher education, athletics, and any professional environment. Students review current literature on leadership, analyze their own leadership style, and work to expand their capacity to lead through knowledge, skills, and attitudes. Communication skills, team building, and conflict management is emphasized. Additional focus is placed on developing leaders in a professional environment.

EDCI 699 **INTERNSHIP IN EDUCATION (6)** *Prerequisites: Passing scores on Praxis I, Praxis II, and VCLA. Virginia Reading Assessment (VRA) is required for elementary and middle school licensure. In addition to completion of professional studies/licensure requirements, all content requirements for a student's particular endorsement must be completed prior to taking the class.* Supervised field experience in a classroom setting and seminar sessions are required. Placement is arranged at the elementary, middle, or secondary level based on

the teaching endorsement sought. All licensure coursework must be completed prior to or concurrently with the teaching internship.

ECONOMICS COURSE

ECON 600 **ECONOMICS FOR K-12 EDUCATORS (3)** This course is designed to provide content knowledge in economics to teachers of grades K-12. The course content derives from the Virginia History and Social Science SOLs, providing the economic concepts needed for day-to-day classroom instruction. The economic way of thinking is developed and a variety of instructional strategies are demonstrated to model effective teaching techniques.

EDUCATION AND HUMAN DEVELOPMENT COURSES

EDHD 602 **HUMAN DEVELOPMENT (3)** Focuses on the development of the individual from conception through intricate changes of growth and aging over the life span, including information about scientific discoveries and personal insights throughout life.

EDHD 609 **RESEARCH METHODS AND APPLICATIONS (3)** Examines research methodology, tools, and resources available to the educational practitioner with specific emphasis on the use of quantitative and qualitative research in problem identification and resolution. Enables students to identify and apply relevant research to persistent or emerging problems and to develop appropriate assessment tools and techniques for ongoing educational activities.

EDHD 610 **TESTS AND MEASUREMENTS (3)** Examination through lecture, test file, and test participation of standardized norm-referenced tests and the newer criterion-referenced tests. Purposes and interpretations are approached historically, theoretically, and statistically.

EDHD 669 **SPECIAL TOPICS IN EDUCATION (1-3)** Intensive study of a problem or topic in education. Topic varies according to professor and term offered.

EDHD 670 **INDEPENDENT STUDY (1-3)** Provides for pursuit of individual interest and projects not covered in existing courses. May be repeated if subjects of study vary and requires approval of the dean of the School of Education and Human Development.

EDHD 671 **PROFESSIONAL PROJECT IN EDUCATION (3, 6)**
Requires the presentation of a proposal before enrolling in the project. The format of the finished project must be consistent with a recognized and agreed on manual of style.

EDUCATIONAL LEADERSHIP COURSES

- EDLS 603** **LEGAL AND ETHICAL ISSUES (3)** Explores the responsibility of the school as a social institution for students, parents, taxpayers, and employees; examines the legal framework of constitutional, case and statute law, and ethical issues pertaining to schools and identifies the implications for educational practice.
- EDLS 609** **RESEARCH METHODS AND APPLICATIONS FOR EDUCATIONAL LEADERS (3)** Examines research methodology, tools, and resources for the educational leader. Particular emphasis is placed on action research focusing on effective schools and student achievement. Emphasis is given to the appropriate use of research tools and educational technology in the analysis of data including data driven decision making and implementing school and/or division-based research projects or school improvement plans. Both formative and summative evaluation strategies are emphasized.
- EDLS 613** **FISCAL AND RESOURCE ACCOUNTABILITY (3)** Examines the multiple roles and responsibilities of leaders for establishing priorities, budget development and control, accounting procedures and safeguards, resource maintenance and management, and environmental safety.
- EDLS 623** **PERSONNEL (3)** Examines the theory and practice relative to effective human resource administration. Emphasis is placed on the recruitment, selection, educational development, evaluation, compensation, and legal rights of personnel.
- EDLS 636** **APPLICATIONS IN EDUCATIONAL TECHNOLOGY (3)** Focuses on the prudent use of technology by educational leaders. Basic computer literacy is required. These skills are enhanced through a workshop approach that models effective applications of technology to leadership responsibilities in classroom and administrative settings.
- EDLS 643** **THE PRINCIPALSHIP (3)** A study of the schools as semi-autonomous educational units within the structure of the state and the law, policy, and mandates. Emphases are on developing knowledge and skill in the areas of shared decision making, empowerment, developing a sense of ownership, and formative assessments of school effectiveness.
- EDLS 646** **IMPROVING THE SCHOOL STRUCTURE AND CLIMATE (3)** Focuses on the forces and factors that influence the teaching/learning environment and encourages taking charge of change, as well as leading and facilitating the process and the people involved. Emphasis is placed on assessing current educational institutions and developing strategies for implementing improvements.
- EDLS 653** **SUPERVISION AND EVALUATION OF INSTRUCTION (3)** Focuses on the nature and function of supervision as a means to improve student achievement and teacher effectiveness and examines the roles of the supervisor, the building administrator, and the teacher in establishing effective instruction in each classroom.

EDLS 698-699 LEADERSHIP INTERNSHIP I, II (3, 3) Provides on-site experiences enabling the prospective administrator to observe, assist, and execute a wide range of leadership and administrative tasks associated with school principalship. The course is under the guidance and direction of a supervising principal and requires a two-semester sequential commitment.

EDLS 700 ISSUES AND TOPICS IN EDUCATIONAL LEADERSHIP (3) Offered as a post-master's degree course for active building and central office administrators. The course focuses on current and relevant issues and topics related to student learning. The course is designed to improve the instructional leadership skills of practicing administrators so schools become fully accredited and meet the requirement of Adequate Yearly Progress as defined by the No Child Left Behind Act. The course is designed for individuals who hold the M.Ed. and are seeking advanced professional development opportunities. The course may be repeated for credit.

ENGLISH COURSES

ENGL 600 LITERARY THEORY (3) Focuses on the analysis of the relevant schools and methods of contemporary literary theory as practiced in current literary journals and books, as well as the application of those schools and methods to academic writing.

ENGL 601 HISTORY OF THE ENGLISH LANGUAGE (3) This course surveys the development of the English language from its origins to modern day English. Students gain understanding of the historical and social developments that shaped and continue to shape the English language. They also gain an understanding of the sounds, spelling, and grammar of the language as it has developed and learn to describe the changes in English pronunciation, writing, vocabulary, and sentence structure across time and place.

ENGL 602 SEMINAR IN FICTION (3) A study of fiction as a genre, with emphasis on the process of reading and interpreting novels and short stories and on the development of the genre.

ENGL 603 SEMINAR IN POETRY (3) A study of poetry as a genre, with emphasis on the process of reading and interpreting poems and on the means by which a poem creates its meanings.

ENGL 604 SEMINAR IN DRAMA (3) A study of the genre of drama with emphasis on the interpretation of types of plays from different periods. Related dramatic criticism is also studied.

ENGL 605 FIGURES IN LITERATURE (3) Extended study in the work of one to three writers of a given time and/or tradition.

ENGL 606 **PRINCIPLES OF LITERARY SCHOLARSHIP (3)** Focuses on the use of bibliographic materials, research methods and resources, and methods of presenting research and concentrates on the range of print and electronic bibliographic sources. The course will emphasize the use and documentation of sources used in literary scholarship and the presentation of the material orally and in print in preparation for the successful completion and defense of a master's thesis in ENGL 699.

ENGL 610 **THORNTON WRITING SEMINAR (1-3)** [*Writing*] [*Specific title changes annually.*] This course in writing is taught by the Writer-in-Residence. Enrollment is limited to specially selected students; prospective enrollees should apply to the Thornton Committee and be prepared to submit writing samples for admittance. The course is usually structured as a workshop and may be repeated for credit if the specific title and instructors are different. Students taking the class for graduate credit will be expected to compose a portfolio of original work to be submitted for publication.

ENGL 613 **ADVANCED ENGLISH GRAMMAR AND LINGUISTICS (3)** This course presents students with detailed information about the systems that comprise the English language and how these systems interact to function as language. Students will learn the basic components of the linguistics of English (the systems of sound, word formation, meaning, and structure) and will focus on the detailed principles of phrase and clause structure. Finally, students will consider the applications of the systems of language, which may include discourse and pragmatic variation, language acquisition, and social constructs imposed on language.

ENGL 616 **SPECIAL TOPICS IN ENGLISH (3)** Intensive study of a problem or topic or a detailed examination of a single author's work. Topic will vary according to professor and term offered.

ENGL 623 **MULTICULTURAL LITERATURE (3)** Exploration of different cultures and literatures, the effects of culture on perspective, the historical self-concepts of different peoples, and other peoples' attitudes toward America, using such writers from around the world as Milan Kundera, Fae Myenne Ng, and Chinua Achebe.

ENGL 645 **RHETORIC AND COMPOSITION: GRADUATE WRITING (3)** *Prerequisite: Graduate standing or permission of program director required.* An advanced course designed to expose the student to the broad range of strategies commonly used in invention, composition, and revision of expository prose and to cultivate the student's command of expository prose through several carefully prepared and intensively revised papers. The course will be practical rather than theoretical and is intended to help students meet the standards expected of writing at the graduate level.

ENGL 646 **CREATIVE WRITING (3)** Poetry, fiction, and creative non-fiction are analyzed from numerous points of view, with a focus on generating and revising original literary works.

ENGL 647 RELIGION AND LITERATURE (3) Examines how religious institutions, concepts, and values have been presented in and challenged within literary works. The course may take as its emphasis a given time period and/or religious tradition. Readings may include works by authors from various religious communities, as well as recent theoretical work by scholars working in the field of religion and literature.

ENGL 648 GENDER AND LITERATURE (3) Focuses on representations of women and men, constructions of femininity and masculinity, and sexual politics while engaging in current debates regarding the materials and methods of literary studies of sex and gender. Major issues include questions of canon and canonicity, difference, equality, sexuality, constructions of gender, intersections of gender with race, class, and nationality, and the role of reading and writing in processes of social change.

ENGL 649 TRANSNATIONAL LITERATURE (3) Study of literary movements, traditions, and legacies across national borders and continents.

ENGL 670 INDEPENDENT STUDY (1, 2, 3) *Prerequisite: Special permission required.* Provides for the pursuit of individual interests and projects not covered in existing courses. These courses may be repeated if subjects of study vary.

ENGL 699 RESEARCH AND THESIS (3) Provides students with the opportunity to do extensive research on a topic of particular interest, culminating in the writing and defense of a thesis under a faculty director and a thesis committee.

ENVIRONMENTAL SCIENCE COURSES

ENVS 600 CONCEPTS IN EARTH AND ENVIRONMENTAL SCIENCE (3) Focuses on a variety of specific earth and environmental science content, concepts, and laboratory and field skills that teachers are required to address when teaching earth science at the middle and high school levels. Topics include plate tectonics, the rock cycle, earth's history, oceans, atmosphere, weather and climate, the solar system and universe, and land and water resource issues.

ENVS 631 ENVIRONMENTAL HYDROLOGY (3) This course covers the fundamentals of surface and subsurface water flow and transport, emphasizing the role of groundwater in the hydrologic cycle, the relation of surface and groundwater flow to geologic structure, and the characterization of contaminants in surface and subsurface water. Special emphasis will be placed on improving the laboratory and field skills of middle and high school level biology and earth science teachers.

ENVS 640 APPLIED ECOLOGY (3) Survey of general ecological principles from an evolutionary perspective, incorporating the three major levels of ecological study: ecosystem, community, and population. Special emphasis is placed on improving the laboratory and field skills of middle and high school level biology and earth science teachers.