

Graduate Teacher Education Course Descriptions

IN 601 INQUIRY IN MATHEMATICS (3 sh)

Students develop mathematical habits of mind and: (1) communicate mathematical ideas effectively through mathematical terminology and symbols, oral and written expression, and translate mathematical ideas from concrete to abstract and vice versa; (2) solve non-routine problems through experimentation and common methods of reasoning (deduction, induction, analogy); and (3) communicate the value of mathematics to their students, and the role of mathematics in the history of civilization. Included are number systems and theory, estimation, measurement, geometry, graph theory, probability and statistics. *Prerequisite: College Algebra*

IN 603 INQUIRY IN SOCIAL SCIENCE (3 sh)

Questions social scientists ask about the human experience, institutions and interactions, and the methods of inquiry used to investigate those questions are studied. Conceptual themes include economic development, geography, political systems in both US and global historical and contemporary contexts. The range of understandings and skills K-12 students should develop when participating in these investigations are explored. The course cultivates a conceptual framework for graduate students to plan and teach social sciences.

IN 605 INQUIRY IN NATURAL SCIENCE (3 sh)

Students investigate the nature of science and processes for acquiring scientific knowledge. Biological and physical sciences are explored through readings, discussions, activities and investigations. Guided discovery of teaching science, involving hands-on experiments and active-learning techniques emphasize the learning and teaching of science. Class activities use multimedia technology. Students learn to develop activities and create an integrated unit appropriate to their grade level interest, based on effective teaching/learning techniques and strategies.

IN 607 INQUIRY IN THE HUMANITIES (3 sh)

Student knowledge of culture's legacy of creative endeavor utilizes materials from Philosophy, Literature (including Literature for Children), and History for exploring human creativity and developing the capacity for aesthetic judgment. Students learn to examine their own beliefs, respond to literature, discuss controversial topics, and communicate complex ideas. Writing and communication skills are strengthened, and the practice of intellectual inquiry while offering experience in designing instructional strategies for K-12 learners is modeled.

IN 609 INQUIRY IN THE ARTS (3 sh)

Students understand and interpret both visual and performing arts using formal and contextual analysis. Understanding and appreciating art (1) as formal constructions in which meaning resides in selection and arrangement of materials or processes particular to the art form, and (2) as the expressions of cultures, eras and makers with distinctive qualities of mind and spirit, and distinctive interpretations of the nature and experience of humankind are presented. The nature of creativity, goals of arts education, and integrating arts across the curriculum is emphasized.

IN 611 MEANING AND PURPOSE: THE FOUNDATIONS OF EDUCATION (3 sh)

Historical, philosophical, and sociological foundations underlying the role of education in the United States are studied by drawing upon the disciplines of philosophy, history, sociology and literature, concepts and methodologies related to the meanings and purposes of education. Contemporary issues such as multicultural understanding, good citizenship, moral education and critical thinking skills are examined. The role of assessment in instructional design decision-making in a standards-based environment is also addressed.

IN 620 INQUIRY INTO THE LEGAL AND POLITICAL PROCESSES OF EXCEPTIONALITY (3 sh)

Historical and current foundations for legal and regulatory requirements influencing educational programs for students with a wide range of exceptionalities are explored. The Individuals with Disabilities Education Improvement Act (IDEA), Section 504 of the Rehabilitation Act, the Javits Act, the Americans with Disabilities Act, the Virginia Comprehensive Services Act and No Child Left Behind are considered. Current regulations governing special education, including disciplinary policies, alternative placements along the continuum, rights and responsibilities of students, parents, teachers, and schools are examined. Communication and leadership skills needed for case management, consultation, collaboration, conflict resolution/mediation, and professional decision-making used for IEP planning and transitioning students into adulthood are studied. Students consider their leadership abilities in becoming effective advocates and committed, ethical, and persuasive leaders in the field, honoring the dynamics of culture and family pertinent to educating exceptional students.

IN 626 ENVIRONMENT BASED LEARNING (3 sh)

This course prepares educators to integrate problem-based themes of the local community into the K-12 curriculum. Using the complex interconnections of the natural and built environments, educators from rural to urban schools learn to facilitate investigations of real-world issues from a variety of perspectives: historical, scientific, socio-cultural, economic, and personal. Using environment-based learning (EBL) to teach state and national standards is emphasized.

IN 627 CONTEMPORARY LEARNING THEORY FOR DIVERSE LEARNERS (3 sh)

This course applies contemporary brain theory research to a wide range of diversity present in today's schools. This course covers the role of challenge, perception, patterning, and spatial memory and the total physiology as part of learning. The underlying concept that each brain is unique provides the fundamental concepts of differentiated curriculum.

IN 628 PUBLIC POLICY IN EDUCATION AND COMMUNITY RELATIONS IN EDUCATION(3 sh)

This course examines the influence of political and social constructs that effect decisions relative to education in both public and private schools, including home schooling. Emphasis is placed on the role of public education in the greater community. Using current legislative issues at state and federal levels, the students will consider the impact of public policy on effective schools.

IN 629 LEADERSHIP IN EDUCATION (3 sh)

This course is designed to prepare students to be effective teacher leaders in their schools. It will focus on leadership styles, funding strategies, mediation strategies and other issues related to empowering teachers to become school leaders.

IN 630 METHODS OF PROFESSIONAL INQUIRY (3 sh)

This course will prepare students to conduct scholarly research through a wide variety of resources. Using both primary and secondary documents, students will learn how to search traditional and contemporary media documents. Further, students will learn how to formulate a thesis and appropriately document supporting evidence through literature reviews and research methodologies.

IN631 CURRICULUM DEVELOPMENT AND DESIGN (3sh)

This course offers a critical analysis of the K-12 curriculum from a variety of disciplinary perspectives. It will include a review of historical developments, an analysis of pressures affecting curriculum change and status, an examination of curriculum-making issues, and a consideration of current trends in curriculum design and practice.

IN 632 EDUCATION LAW (3sh)

A study of the relevant legal principles that affect the operation, organization, and administration of schools in Virginia and the United States, students examine how judicial interpretation of common, statutory, and constitutional law influences educational policy making. This course

assists teachers and others in related professions to gain knowledge about legal issues to help them effectively perform professional duties.

IN 623 ASSESSMENT AND PLANNING FOR INSTRUCTIONAL IMPROVEMENT (3sh)

This course emphasizes variables related to both short and long-term planning as well as assessment of curricular programs. Using a variety of assessment tools, students will learn how to analyze data and make informed decisions for program evaluation and classroom instruction. Discussions will also include the use of both quantitative and qualitative data in planning new curricular programs.

IN634 THE INTERSECTION OF LIFE AND LAND: ISSUE-DRIVEN INVESTIGATIONS (3sh)

This course is designed as a model of the environment-based learning process. Educators will participate in an investigation of a local socio/environmental issue, focusing on the integrated relationship of environment to people and culture. The investigations will involve field trips, studies of history, literature, ecological principles, and cultural connections, and discussions of strategies for implementing EBL projects with K-12 students.

ED 510 PRACTICUM (.5 sh)

The practicum experience is designed for MAT students who are preparing to teach. This experience provides them with an opportunity to observe and assist teachers in the classroom, and to understand the ethical issues and the practice of accepted standards of professional behavior.

ED 590 GRADUATE WRITING SEMINAR (1 semester hour)

This course is intended for students who are identified (or who self-identify) as needing assistance in developing appropriate graduate-level writing skills. Instruction is individualized and based on diagnosis of writing samples. Topics include: Sentence structure, parts, patterns and choices, Elements of style, the writing process, Essay construction, Development of professional "voice", Conventions of form and format and Documentation and attribution.

ED 601 INQUIRY INTO HUMAN GROWTH, DEVELOPMENT, AND DIVERSITY (3 sh)

Normal patterns of human development during the K-12 school years, including the theoretical, pragmatic and complex nature of language acquisition, and socio-emotional well being of K-12 students is studied. Variations in physical, socio-cultural, ethnic, religious in the contexts of schools, families (e.g. the effects of daycare and divorce), and society, as a whole, are studied through difference and similarities. Developmental patterns for at-risk populations, students with disabilities and identified gifted students as related to age, level of involvement and effect on learning are examined. Intervention strategies grounded in current research will focus on successful learning for K-12 students.

ED 603 THOUGHTFUL ASSESSMENT (3 sh)

With an awareness of current standards of learning, curriculum criteria, scoring rubrics, and identification processes of students with both challenges and gifted academic abilities, this course will focus on the learning tasks, developing criteria, assessments and tests appropriate to the children's interests and levels of development. Students will get a historical understanding of the development of tests and assessments and the different functions they can serve, as well as undergoing a variety of tests and assessments themselves and reflecting on their uses and limitations. Further, student will learn to analyze assessment data to make decisions about how to improve instruction and student performance for all learners. Students will have a working knowledge of the norm and criterion referenced tests, rating scales and checklists, and portfolio assessments currently used in the school systems, including functional assessments of behavior. They also will learn how these tests are used to identify student learning needs as well as those who are gifted and talented and those who are potentially identified as gifted and how classroom assessments can be differentiated to address individual student differences.

ED 605 AN INTEGRATED APPROACH TO LANGUAGE ARTS (3 sh)

Students learn effective language arts instruction of reading and writing and how to regard the language arts (reading, writing, speaking, listening, and literature study) as an integrated whole. Research and theory covered in this class for instructing students with special needs. Students learn about reading disability and interventions. A balanced approach to teaching reading, writing, listening, and speaking is explored through readings, discussions, and practicum assignments. Federal policy connected to Reading First through the study of the five components of effective reading instruction (phonemic awareness, phonics, fluency, vocabulary and comprehension) identified by the National Reading Panel is emphasized, as well as using current assessment practices for differentiation to meet individual learner's developmental and educational needs. Developmental stages of spelling and vocabulary development are emphasized. Flexible grouping, small group instruction, collaborative planning, reflective practice the domains of teaching writing (including composing, written expression, usage and mechanics and the writing process of planning, drafting, revising, editing, and sharing) are studied.

ED 606 AN INQUIRY APPROACH TO TEACHING READING AND WRITING IN THE CONTENT AREA (3SH)

Reading comprehend and learning with text, whether printed or digital, and how teachers assist in these processes, including the complex nature of language acquisition and reading and the impact of this on content comprehension is explored. Fostering an appreciation for a wide variety of literature and methods for determining independent reading levels will be developed. Basic reading skills (such as phonemic awareness, understanding of sound/symbol relationships, phonics instruction, syllables, phonemes, morphemes, decoding skills, and word attack skills) influence a student's ability to comprehend content area curriculum through text. Understanding how to comprehend and learn from texts assess students' comprehension strategies, and create instructional procedures will be addressed. Understanding narrative and expository texts used in sciences, social sciences and humanities will build a repertoire of instructional strategies including questioning, summarizing and retelling skills, and strategies in literal, interpretive, critical, and evaluative comprehension to help K-12 students learn independently.

**ED 607 INSTRUCTIONAL STRATEGIES FOR INQUIRY-BASED CLASSROOMS
3 sh)**

Students develop pedagogical skills in the areas of classroom management, differentiating instructional goals and objectives, writing lesson and unit plans, and assessing student progress. Graduate students are provided with a range of instructional options from which to choose when working in heterogeneous classrooms. Using current standards of learning (SOLs), curriculum criteria, and scoring rubrics, students will focus on the learning tasks by planning effective lessons and developing criteria, assessments and tests appropriate to the children's interests and levels of development.

ED 608 FIELD EXPERIENCE FOR SPECIAL EDUCATION ADD-ON ENDORSEMENT

This is a 150 clock hour classroom experience for licensed teachers seeking to add-on an endorsement in Special Education for the General Curriculum. Students receive mentored practice in planning, instructing and assessing student learning. In addition, they develop and understanding of the ethical issues and the practice of accepted standards of professional behavior and legal factors applied to exceptional students in the general curriculum.

ED 609 STUDENT TEACHING: ELEMENTARY (6 sh)

A (minimum) 12-week classroom placement requires full classroom teacher responsibility for a minimum of five consecutive weeks, and accumulates a total of 300 hours with a minimum of 150 clock hours of direct instruction within the grade level range of the endorsement area sought. Students receive mentored practice in planning, instructing and assessing student learning, as well as the ethical issues and accepted standards of professional behavior.

ED 610 STUDENT TEACHING: MIDDLE GRADES (6 sh)

A (minimum) 12-week classroom placement requires full classroom teacher responsibility for a minimum of five consecutive weeks, and accumulates a total of 300 hours with a minimum of 150 clock hours of direct instruction within the grade level range of the endorsement area sought. Students receive mentored practice in planning, instructing and assessing student learning, as well as the ethical issues and accepted standards of professional behavior.

ED 611 SEMINAR (2 sh)

Seminar explore with other students the insights and understandings they gain in the Student Teaching (**ED609/610/614**) or **Professional Development Project (ED612)** experience. During the seminar students critically analyze their own teaching through written and oral presentations. **ED 611 is to be taken concurrently with ED609/610/614 or ED612.**

ED 612 PROFESSIONAL DEVELOPMENT PROJECT (3 sh)

Taken in lieu of student teaching, students choose from options including a classroom research project, a supervision project, or a self-designed project. The project is planned with the student's advisor and presented to a committee of three from the graduate faculty. IN 630 is a prerequisite for this course.

ED 613 REFLECTIVE SYNTHESIS PROJECT (1 sh)

Students reflect on in a final paper, their entire MAT experience, share the understandings gained through course work, practica, and Student Teaching what it means to be an inquiring teacher both conceptually and practically for cultivating inquiry in K-12 students. **ED 613 is to be taken concurrently with ED609/610/614 or ED612.**

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ED 614 STUDENT TEACHING: SPECIAL EDUCATION FOR THE GENERAL CURRICULUM (6 sh)

A (minimum) 12-week classroom placement requires full classroom teacher responsibility for a minimum of five consecutive weeks, and accumulates a total of 300 hours with a minimum of 150 clock hours of direct instruction. Students receive mentored practice in ethical issues, accepted standards of professional behavior, planning, instructing and assessing student learning. Knowledge of assessment, evaluation, differentiated instruction, best practices, and technology to promote K-12 student learning within the scope and sequence of the general curriculum while addressing individualized needs and implementing IEPs is studied.

ED 615 Gifted Education Field Experience (1 sh)

For certified teachers seeking an add-on endorsement in Gifted Education, this practicum/field experience includes 45 instructional hours of successful teaching experience with gifted students in a heterogeneously grouped (mixed ability) classroom or a homogeneously grouped (single ability) classroom. Students receive mentored practice in planning, instructing and assessing student learning, developing an understanding of ethical issues and practice of accepted standards of professional behavior.

ED616 NATURE JOURNALING ACROSS THE CURRICULUM (3sh)

Educators study a variety of journaling techniques and artistic medium for observing and documenting the natural world, through illustrations, painting, photographs, print material and personal/professional writing. Included are strategies for improving the artistic, written and reflective abilities of K-12 students and using the outdoors around the school and community as sites for nature journaling.

ED617 MATH IN THE GARDEN (3sh)

Educators learn how to use the garden and local environment to teach standards-based math skills to students in grades K-8. Math concepts from basic operations to geometry and data analysis are covered. Includes field trips to gardens and natural areas for implementation practice.

ED618 NATURAL RESEARCH: USING THE ENVIRONMENT FOR STUDENT-DRIVEN INVESTIGATIONS (3sh)

This course provides educators with the skills needed to work with students as they design and perform their own science experiments related to the local environment. Educators participate in watershed-based field investigations, develop experiments, collect and analyze data, and present results. Educators learn strategies and techniques for facilitating science-based investigations with students in grades 4-12.

ED619 TROUT IN THE CLASSROOM (3sh)

Educators will learn to implement the science-based curriculum developed by Trout Unlimited. Students in grades K-12 raise trout from eggs, monitor tank water quality, engage in stream habitat study, and release their trout in a local state-approved stream. The course focuses on integrating TIC across the curriculum, finding resource support and funding, and tank set-up and maintenance. Field experiences include stream/watershed studies and fisheries biology.

ED621 STORYTELLING: A PATHWAY TO CURRICULUM INTEGRATION (3sh)

The oral tradition of storytelling provides a window into the context of culture and environment; the process addresses standards in language arts, science, and social studies. Educators come to understand how to use this timeless tradition as a tool for motivating student learning while enhancing the oral and written abilities of K-12 students. Students learn to observe, reflect upon and document their own sense of place in time.

ED620 THE OUTDOOR CLASSROOM: EBL PROGRAM DEVELOPMENT, IMPLEMENTATION AND EVALUATION (3sh):

A variety of pedagogical issues related to environment-based learning (EBL) are studied, including: outdoor learning methods, management of students and materials, program and student assessment, working with special needs students and diverse populations, lesson planning, technology, curriculum resource development, area mapping, and schoolyard habitat development and management.

ED 622 AN INTEGRATED APPROACH TO EXCEPTIONALITY (3 sh) Characteristics of students with learning disabilities, emotional disturbance, intellectual disabilities, developmental delays, autism, traumatic brain injury, multiple disabilities, giftedness, overlapping exceptionalities. These and other health impairments are studied across age-span/developmental issues, levels of severity, cognitive functioning, language development, emotional and behavioral adjustment, social development, related medical aspects impacting learning, and cultural/ethnic and socioeconomic factors. Various forms of communication including verbal, non-verbal, and written skill development in understanding the dynamic influence of the family system and cultural/environmental milieu as applied to the education of exceptional students and emphasis on case management and collaboration with other entities, including students, parents, general education teachers, administrators, paraprofessionals and agencies responsible for implementing IEPs on the continuum of placements. Practical applications of service delivery, curriculum, and instruction related to exceptional learners is explored.

ED 623 ADVANCED STUDIES OF GIFTED LEARNERS (3 sh)

With historical background of gifted education, students develop a deep understanding and appreciation for the cognitive, social, and emotional characteristics of gifted learners and skills in meeting associated educational needs of these gifted learners. Multiple perspectives on intelligence are discussed with current issues in the field of gifted education, including: alternative approaches to identification for special populations of gifted learners and meeting needs of gifted learners with multiple exceptionalities. Advocacy skills for gifted, identification, holistic assessment, appropriate models and strategies, alternative programs and options in delivering appropriate services are emphasized.

ED 624 AN INQUIRY APPROACH TO DIFFERENTIATED CURRICULUM AND INSTRUCTION (3 sh)

Recognizing that students in today's classrooms are widely diverse, attention will be given to the scope and sequence of the general education curriculum (including the Standards of Learning and the state accountability system) and strategies to promote successful integration of students with disabilities with their nondisabled peers. Included is the use of technology to support learning, along with strategies to develop, provide and evaluate instruction consistent with students' individual needs (including educational implications of various disabilities). Diverse learning needs for all students, including exceptional learners, through curriculum development and differentiation, skill development plans, individual assessment strategies, and flexible planning and grouping strategies is studied. Environmental factors, connections among conceptual, curricular and social/emotional issues effective strategies for working collaboratively with professionals, parents/families and students in and with other school settings are addressed.

ED 625 CLASSROOM AND BEHAVIORAL MANAGEMENT: THEORY AND PRACTICE (3 sh)

Theories and practices associated with establishing, implementing, and maintaining classroom and behavioral management procedures are emphasized, along with preventing behavior problems and modifying classroom environments to enhance student learning. Response to Intervention theory (RTI) and strategies are included in this course. Participants develop and analyze specific techniques to increase positive behavior and decrease inappropriate behavior that effect learning. Methods of behavioral/environmental assessment are addressed.

ED626 CHESAPEAKE CLASSROOMS (3sh)

Educators choose from any of the five-day Chesapeake Classroom summer sessions offered by the Chesapeake Bay Foundation and complete the MBC requirements. Chesapeake Classrooms equips educators with the knowledge, skills, and confidence to include the environment in the K-12 curriculum and involve students in outdoor learning. Educators explore the watershed and examine the connection between land-use and water quality through hands-on, standards-based investigations, and action projects.

ED 627 COLLABORATION AND TRANSITIONS FOR EXCEPTIONAL STUDENTS (3 sh)

Understanding the educational process of transitions from childhood to adulthood for exceptional students, including developing independent living skills, pre-vocational and career skills, self-advocacy/self-determination skills, and pursuit of post-secondary education is studied with legal and regulatory components related to transition planning within the IEP, including the provision of transition services and effective models of instruction for secondary transition. Strategies to develop and foster family and professional partnerships honoring diversity and culture, while emphasizing the role of collaborative planning in the preparation and delivery of developmentally appropriate services for exceptional learners is explored through collaboration with all stakeholders – students, families, teachers, related service providers, paraprofessionals, and other school staff –to develop communication and leadership skills conducive to implementing quality student programs.

ED 631 TECHNOLOGIES TO ADVANCE LEARNING (3 sh)

The application of contemporary technologies to advance teaching and learning is studied. Students explore a wide variety of media and technological resources develop learning plans that demonstrate an understanding and application of the course objectives.

ED 632 INTEGRATED RESEARCH (6 sh)

Pre-requisite: ED 630

Students work with their advisors to identify an issue and develop a thesis for research. Through comprehensive scholarly study, the student will present conclusions that offer innovation or resolution to their research question to a faculty panel.