DEPARTMENT OF TEACHING AND LEARNING

Whitney S. Newcomb, Ph.D.
Professor and interim chair

The Department of Teaching and Learning is committed to excellence in the initial and continuing preparation of teachers for schools, government agencies, for-profit and nonprofit organizations, working with diverse groups; to modeling and encouraging critical reflection on practice; to collaborating and forming educational partnerships; to applying research and conducting scholarly endeavors that examine educational processes, issues and concerns; and to providing assistance and service to local, state, regional, national and international communities. Learn more by visiting the Department of Teaching and Learning webpage (https://soe.vcu.edu/about-us/departments/teaching-and-learning/).

- Curriculum and Instruction, Master of Education (M.Ed.) (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/curriculum-instruction-med/)
- Reading, Master of Education (M.Ed.) with a concentration in K-12 reading specialist (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/reading-med-concentration-k12-reading-specialist/)
- Reading, Master of Education (M.Ed.) with a concentration in teaching English to speakers of other languages (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/reading-med-concentration-tesol/)
- Teaching, Master of (M.T.) with a concentration in early and elementary education (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/teaching-mt-concentration-early-elementary-education/)
- Teaching, Master of (M.T.) with a concentration in English education (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/teaching-mt-concentration-english-education/)
- Teaching, Master of (M.T.) with a concentration in history/social studies education (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/teaching-mt-concentration-history-social-studies-education/)
- Teaching, Master of (M.T.) with a concentration in mathematics education (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/teaching-mt-concentration-mathematics-education/)
- Teaching, Master of (M.T.) with a concentration in science education (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/teaching-mt-concentration-science-education/)
- Reading Specialist, Certificate in (Post-master’s certificate) (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/reading-specialist-certificate/)
- Teaching Elementary Education, Certificate in (Graduate certificate) (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/teaching-elementary-education-certificate/)
- Teaching English to Speakers of Other Languages, Certificate in (Post-baccalaureate graduate certificate) (http://bulletin.vcu.edu/graduate/school-education/teaching-learning/teaching-english-speakers-other-languages-certificate/)

English education

ENED 601. Young Adult Literature. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examination of literature written for young adults, literature appropriate for young people in middle schools and high schools. Focuses on the content, characteristics and teaching of such literature. Crosslisted as: ENGL 601.

Reading

READ 600. Analysis and Correction of Reading Problems. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Prerequisite: TEDU 561 or permission of instructor. An analysis of factors relating to reading difficulty. Diagnostic testing procedures and instructional strategies appropriate for the reading specialist in clinical and classroom settings will be emphasized.

READ 601. Psycholinguistics and Language Arts Curriculum. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An investigation of the psychological processes involved in language behavior and the relationship of these processes to the teaching of the basic communication skills.

READ 602. Literacy for Adults. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An examination of methods, strategies and techniques appropriate for teaching adult readers functioning at levels ranging from beginning to college level. Assessment issues, basic reading concepts, skills, and adult reading methods and materials are analyzed. Focus is on adapting teaching techniques for use with adults in various academic and life settings.

READ 605. Organizing and Implementing Reading Programs. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Integrates reading theory with program implementation. Analyzes the role of reading specialist as related to program design, assessment, supervision, instruction, and resource responsibilities. Includes specific field-based requirements.

READ 672. Internship. 1-6 Hours.
Semester course; 1-6 field experience hours. 1-6 credits. May be repeated for a maximum of 12 credits. Prerequisites: READ 600 and TEDU 561. Study and integration of theory with practice in clinical or off-campus settings supervised by an approved professional and university faculty. May include seminars, selected readings, projects and other activities designed and evaluated by supervising faculty. This course includes site-based requirements.

READ 691. Topics in Reading. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: permission of instructor. Examines recent trends and topics within the field. Includes review of pertinent research, examination of policy issues and investigation of historical movements. Clinical application is included as appropriate.
READ 700. Externship. 1-6 Hours.
Semester course; 1-6 field experience hours. 1-6 credits. May be repeated for a maximum of 9 credits. Prerequisite: READ 605. Plan of work designed by extern with prior approval of the offering department. State certification or equivalent may be required for some externships. Off-campus planned experiences for advanced graduate students designed to extend professional competencies, carried out in a setting, under supervision of an approved professional. Externship activities monitored and evaluated by university faculty. This course includes site-based requirements. Graded as Pass/Fail.

Teacher Education
TEDU 500. Workshop in Education. 1-3 Hours.
Semester course; 1-3 credits. Repeatable to 6 credits. Designed to focus on a single topic within a curriculum area, the workshop offers graduate students exposure to new information strategies and materials in the context of a flexible instructional framework. Activities emphasize a hands-on approach with direct application to the educational setting.

TEDU 501. Supervising Student Teachers. 1-3 Hours.
3 credits. Prerequisite: permission of instructor. Focuses on the role of clinical faculty as site-based supervisors of student teachers. Provides knowledge, skills and training necessary to supervise and evaluate student teachers.

TEDU 503. Guidance for Exceptional Children. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An introduction to guidance strategies for assisting exceptional children. Special attention is given to the interrelationships of home, school and community resources.

TEDU 510. Instructional Technology in PK-12 Environments. 2 Hours.
Semester course; 2 lecture hours (delivered online). 2 credits. Prerequisite: EDUS 301, PSYC 301 or PSYC 304 with a minimum grade of C. An introduction to effectively integrating technology into PK-12 instruction to improve student learning outcomes. Students will have hands-on experiences with a variety of current instructional technologies and learn how to integrate these technologies into their practice using research-driven theoretical frameworks. This online course models effective virtual teaching methods that can be utilized in hybrid and fully online environments. Students will design technology-rich instructional modules that can be utilized to improve student learning in their content areas, as well as develop personal learning networks that will continue to provide them with informal and independent learning opportunities well after the conclusion of the course.

TEDU 511. Curriculum and Instruction for Residency Programs. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Enrollment is restricted to students enrolled in the RTR program. This course is designed to support students in the RTR program to understand and use developmentally appropriate instructional methods to teach today’s diverse students. The course will explore multiple curriculum models as well as Virginia’s Standards of Learning and Virginia’s Foundation Blocks for Early Learning as the foundation for making strong and informed instructional decisions.

TEDU 512. Teaching Elementary Health and Physical Education. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Restricted to students in general health and physical education who have been admitted to teacher preparation program. Designed to enhance knowledge and advanced pedagogical skills in teaching elementary health and physical education. Through an analysis of the NASPE and AHEE standards, state SOL, goals, objectives and programs, students construct year-round curricula and daily lesson plans for use in public school settings. Emphasis also placed upon classroom management skills and administrative and organizational strategies dealing with facilities, equipment, teaching aids, measurement and safety.

TEDU 513. Teaching Health Education. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Restricted to students in general health and physical education who have been admitted to teacher preparation program. Prepares students to become independent problem-solvers and decision-makers by applying previously acquired knowledge to advanced instructional techniques in the public school health classroom. Students acquire advanced pedagogical skills and gain insight into the development of health education programs for middle and secondary schools. Course includes the development of curricula, unit plans and lesson plans.

TEDU 514. Teaching Physical Education. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Restricted to students in general health and physical education who have been admitted to teacher preparation program. Designed to enhance knowledge and advanced pedagogical skills in teaching secondary physical education. Through an analysis of the national standards, state SOL, goals, objectives and programs, students construct year-round curricula, units and daily lesson plans to be used in public schools. Emphasis also placed upon the acquisition of administrative and organizational knowledge dealing with facilities, equipment, teaching aids, measurement and safety.

TEDU 516. Elementary Social Studies Methods. 2 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Restricted to students in general health and physical education who have been admitted to teacher preparation program. Prepares students to become independent problem-solvers and decision-makers by applying previously acquired knowledge to advanced instructional techniques in the public school health classroom. Students acquire advanced pedagogical skills and gain insight into the development of health education programs for middle and secondary schools. Course includes the development of curricula, unit plans and lesson plans.

TEDU 517. Science Education in the Elementary School. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Prerequisites: TEDU 414 and admission to teacher preparation program. Corequisites: TEDU 310 (Practicum B), 522 and 591. A course designed to renew and/or expand teachers’ knowledge and skills in the teaching of science in the classroom and the community. New materials and methodologies will be examined in the light of current trends, research findings and professional recommendations.

TEDU 521. Teaching Mathematics for Middle Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Emphasis on current instructional strategies, learning theories and manipulative materials appropriate for teaching mathematics to children. The content focuses on middle grades, but the developmental approach includes some topics from the primary grades.
Developing and evaluating instructional alternatives will be stressed.

of and alternatives to problems encountered by students while teaching.

appropriate teaching experience. An in-depth investigation into the nature
teachers.

TEDU 535. Problems of Social Studies Instruction. 3-6 Hours.
Semester course; 3-6 credits. Prerequisite: Permission of instructor and appropriate teaching experience. An in-depth investigation into the nature of and alternatives to problems encountered by students while teaching. Developing and evaluating instructional alternatives will be stressed.
TEDU 550. Teaching Interdisciplinary Language Arts and Social Studies in the Middle School. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Describes and applies basic principles of middle school education and early adolescence with attention to the persistence of the academic disciplines and traditional curricular approaches to English and social studies. Offers a rationale for interdisciplinary instruction and proposes solutions to the practical dilemmas that confront interdisciplinary teaching in the middle school. Identifies interdisciplinary themes drawn from history, the social sciences and literature; plans units of instruction around such themes; devises instructional strategies for the teaching of interdisciplinary skills and content.

TEDU 551. Foundations of Bilingual Education. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. This course will focus on the historical foundations of bilingual education in the U.S., current models of bilingual programs in PK-12 school settings and contemporary understandings of bilingualism/ biliteracy development using sociolinguistic and sociocultural perspectives.

TEDU 552. Methods for Teaching Multilingual Learners. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Provides students who plan to teach people whose native language is not English with a variety of instructional/learning strategies. Presents and explores current approaches and methodology, as these relate to linguistic features and pedagogy. Crosslisted as: ENGL 552/ LING 552.

TEDU 554. Applications of Computers in the Teaching of Mathematics. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: College calculus course or permission of instructor. Introduction to computers and programming using the language, BASIC. Applications of the computer in algebra, geometry, trigonometry, statistics and calculus.

TEDU 555. Geography in Social Studies Curriculum. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A survey of geographic concepts and processes as a basis for examining curricular projects for and developing instructional approaches to geography as part of the social studies curriculum.

TEDU 556. Advanced Computer Applications in Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: TEDU 507 or its equivalent, a portfolio demonstrating content and skills covered in TEDU 507, or permission of instructor. Develops the technology instructional framework, including teaching strategies, models of instruction and best practices in technology integration; creation of instructional lessons integrating technology by using typical office suite production tools; and connecting theory to practice. Will satisfy most of the ISTE and state technology standards.

TEDU 560. Instructional Strategies Using the Internet. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Emphasizes understanding of informational technology instructional strategies; theoretical underpinnings of constructivism; preparation and assessment of instructional models that include project-based learning, inquiry-based learning, problem-based learning and collaborative learning using resources on the Internet.

TEDU 561. Literacy Foundations: Sociological/Psychological Perspectives. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. The purpose of this course is to provide a basic understanding of the theories, processes and methodologies of reading instruction. Multidisciplinary, multicultural aspects of reading instruction are stressed. Topics of particular importance to the classroom teacher are emphasized, including reading, writing, listening and speaking, and digital literacies.

TEDU 562. Reading Instruction in the Content Areas. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Prepares teachers to apply skills and methods of reading instruction to content areas in elementary, middle and secondary school curricula. Includes theoretical bases and methodology for incorporating reading skills and strategies within content areas of instruction.

TEDU 564. Teaching the Gifted. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Curriculum development and organization of activities for the gifted at different maturational levels with specific attention given to program content, materials, resources and guidance.

TEDU 566. Diagnosis and Remediation in Reading. 4 Hours.
Semester course; 3 lecture hours and 1 practicum hour (delivered online, face-to-face or hybrid). 4 credits. Prerequisite: TEDU 426 or TEDU 561. Studies reading problems by focusing on reading diagnosis and correction related to classroom and clinic. Involves evaluating and tutoring individuals with reading difficulties. A supervised practicum is a course component that includes site-based requirements.

TEDU 569. Diagnosis and Remediation in Mathematics. 3 Hours.
Semester course; 3 lecture hours. 3 credits. For classroom and resource teachers working with children whose arithmetic achievement is significantly lower than grade-level placement or expectancy level; designed to remediate learning problems in arithmetic at the child's level and to aid teachers in the sequential development of skills and concepts.

TEDU 575. Intercultural Communication. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). An experientially oriented seminar for persons preparing for or in careers necessitating intercultural communication among persons of differing cultural and/or national backgrounds. Special attention is given to teachers and other professionals who work with a clientele from Latin America, the Middle East, Asia, Africa and Eastern Europe. American cultural patterns broaden understanding of specific groups and engagement in intercultural communication. Crosslisted as: FRLG 575.

TEDU 588. Classroom Management. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Designed to assist teachers in becoming effective classroom managers. Emphasis on application of classroom management, motivational and instructional theories. Models of classroom management explored; personal management plans developed.

TEDU 591. Social Studies Education in the Elementary School. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: TEDU 414 and admission to teacher preparation. Corequisites: TEDU 310, 517 and 522. A course designed to renew and/or expand the knowledge and skills of the classroom teacher in the teaching of social studies. Curriculum emphasis on the development of knowledge, skills, values and attitudes will be examined in the light of professional recommendations, current trends and research findings.
TEDU 594. Topical Seminar. 1-3 Hours.
Semester course; variable hours. 1-3 credits. May be repeated for a maximum of 6 credits. A seminar intended for group study by students interested in examining topics, issues or problems related to teaching and learning.

TEDU 602. National Board Certification I and Externship Proposal Development. 3 Hours.
Semester course; 3 credits. Prerequisites: participation in a two-day pre-candidacy workshop and approval of department. Analyze and reflect on teaching practices, study national teaching standards, and develop initial portfolio entries. Development of externship proposal.

TEDU 610. Developing and Critiquing Visual Literacy. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Develop skills and evaluate the effectiveness and appropriateness of the use of media. Understand imagery, develop visual communication skills to appropriately represent data, video or text by applying design principles in creating print, as well as non-print, as an instructional resource.

TEDU 611. Critical Investigations in Mathematics Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 521, 522 or 545, or permission of instructor. A critical investigation of current and appropriate learning theories, instructional activities, programs and manipulative materials applicable to mathematics education in the elementary school. This course assumes an overall knowledge of the more prominent techniques and materials used to teach mathematics in elementary and middle schools. Students will undertake in-depth critical studies of alternative curricula, materials and strategies based on experience, learning theory and research findings.

TEDU 615. Curriculum Development. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A basic graduate course in curriculum development. Curriculum decision making is examined in relation to foundation areas, content areas and current educational trends. Various conceptions of curriculum are explored.

TEDU 617. Tensions in Educational Theory. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course introduces students to major educational theories they will encounter throughout their studies, such as behaviorism, critical theory, cognitive constructivism and social constructivism. Students will learn to use their experience and the phenomena they study in the field to enter into a dialogue with theories: refining them, challenging them and sometimes even replacing them.

TEDU 618. Curriculum Construction. 3 Hours.
Semester course; 3-6 lecture hours. 3-6 credits. A study of curriculum problems with special attention given to the organization and preparation of teaching units. The course is individualized to meet student needs and nature of study.

TEDU 621. Curriculum Seminar. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A study of curriculum theory, research, and practice for advanced students. The seminar is an opportunity for students to integrate previous course work and professional experiences in curriculum.

TEDU 622. Creative and Cognitive Development. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: EDUS 603. Application of theories of creative and cognitive development in teaching.

TEDU 623. Child Study and Assessment in Early Childhood Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Investigation and application of methods of observing, recording, and interpreting the behavior of young children. Review of criterion and norm-referenced measures for assessing capacities and needs in early childhood education as a baseline for prescribing/providing appropriate activities.

TEDU 624. Early Childhood Education Programs and Policies. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A study of Early Childhood Education paradigms including historical, federally funded and current center and home-based programs. A review of legislation, state and federal, that has affected ECE program development.

TEDU 625. Young Child and the Curriculum. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Translation of curriculum development principles into appropriate curricular programs for young children. Impact of recent research on these curricula. Consideration of child development as related to planned activities and expected outcomes.

TEDU 626. Family-School Partnerships. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 414 or permission of instructor. Studies the rationale, methods, programs and current research of family-school partnerships, preschool through secondary education.

TEDU 627. Exploring Historical Consciousness. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course is designed to introduce students interested in the fields of public history and history teaching to the contemporary scholarship on how people become conscious of history in schools and in the culture at large. Two inquiry questions will guide our work: What does it mean to be conscious of history? and How do people learn to understand history?

TEDU 639. Race, Ethnicity and Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A cross-disciplinary examination of issues related to race, ethnicity and cultural diversity in education. This course works under the premise that race is an essential social category of analysis for the policies and everyday practices experienced in U.S. society. Students will review a variety of historical and contemporary theories of race from early foundations of race theory to relevant contemporary theories and methodological approaches to research and problem resolution strategies. Crosslisted as: EDUS 639.

TEDU 640. Designing and Managing eLearning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: TEDU 556 or 560, or permission of instructor. Emphasizes identification of appropriate methods of instructional delivery to meet online learner needs, develop online modules and lessons for different virtual learning environments, including team and collaborative projects, and best practices associated with the development of online instruction.

TEDU 641. Independent Study. 1-6 Hours.
Semester course; 1-6 credits. May be repeated for a maximum of 9 credits. Determination of the amount of credit and permission of the instructor and department chair must be procured prior to registration. Cannot be used in place of existing courses. An individual study of a specialized issue or problem in education.
TEDU 642. Instructional Mentoring and Coaching. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Designed to develop skills in mentoring, coaching and observing teachers to improve instruction. Students learn how to build an effective mentoring relationship, select appropriate coaching strategies, collect and analyze data during instruction; provide strategic feedback to teachers using supportive language and behavior; assist teachers in analyzing K-12 student work; employ differentiated instruction; and help teachers set professional goals. Emphasis on developing the knowledge, skills and dispositions necessary to respond to teachers' individual and contextual needs through ongoing examination of classroom practice for the purpose of promoting high achievement for all students.

TEDU 643. Teacher as Change Agent. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Designed to help teachers become more effective leaders by assessing and developing their leadership skills, deepening knowledge about policy, sharpening skills at influencing change and developing action plans and issue portfolios to address educational issues.

TEDU 644. Leadership Theory and Practice. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Designed for teacher leadership as opposed to administrative leadership. Explores practical and theoretical models of leadership across several fields, with an emphasis on teacher leadership. Research examined on meaningful collegiality, the art and science of teaching, and the principles of leadership.

TEDU 648. Preparation of Instructional Materials. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 507 or permission of instructor. Development of materials for the classroom with an emphasis on determining medium, designing the message, producing the material and evaluating the effect. The design of these materials will be predicated on the learning modes and instructional styles.

TEDU 649. Educational Media: Theory and Practice. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 507 or permission of instructor. An analysis of educational media with emphasis on the use of media in instructional design and development of teaching strategies.

TEDU 650. Second Language Acquisition. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. This course is designed for those who plan to work with English language learners in diverse instructional settings. A major focus of the course is analyzing second language acquisition theories and how they apply in classroom settings. In-depth analysis of readings will enhance the students’ understanding of SLA and the research related to this field. Students will observe classroom teaching, analyzing the application of SLA theories utilized in the instructional setting. Crosslisted as: LING 650.

TEDU 651. Special Topics in Education. 1-3 Hours.
Semester course; variable hours. 1-3 credits. May be repeated for 9 credits. Check with department for specific prerequisites. A course for the examination of specialized issues, topics, readings or problems in education.

TEDU 657. Mathematics Education Leadership I. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Analyze and reflect on mathematics instruction in the grades K-8 classroom with respect to design, teaching and evaluation of mathematical tasks, inquiry based instruction and discourse. Appropriate learning theories, instructional programs and technology are investigated. This course is an introduction to the role of the mathematics specialist and is a core course for preparation as a K-8 mathematics specialist.

TEDU 658. Mathematics Education Leadership II. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 657 or permission of instructor. Designed for teachers to build skills, understandings and dispositions necessary for mathematics education leadership roles. Emphasis is on developing and refining coaching and professional development skills, becoming familiar with a body of research within mathematics education, and building one's ability to work within and to lead a school-level mathematics learning community. This is a core course for preparation as a K-8 mathematics specialist.

TEDU 659. Mathematics Education Leadership III. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 658 or permission of instructor. Designed to acquaint prospective mathematics specialists with those skills, understandings and dispositions needed to facilitate the lesson study process, create and use formative and summative assessments for diagnosing student mathematical understandings and misunderstandings, and increase communication and formal professional presentation skills to work within and lead a district-level mathematics learning community. This is a core course for preparation as a K-8 mathematics specialist.

TEDU 661. Current Topics in Virtual Teaching. 1 Hour.
Semester course; 1 lecture hour (delivered online, face-to-face or hybrid). 1 credit. Students will investigate and critically consider emerging technological tools and their impact on various forms of virtual teaching and learning. Affordances and constraints of emerging technologies will be identified and participants will consider the implications of these technologies on various content areas and pedagogical strategies.

TEDU 662. Foundations of Online Teaching. 3 Hours.
Semester course; 3 lecture hours; 3 credits. This introductory course in online teaching provides participants the opportunity to explore current research in online teaching, standards for course design and facilitation, methods and models, and the latest tools available. Participants will explore multiple learning management systems, as well as discover how to work outside of these systems to design effective learning environments. This course will benefit teachers working in solely online environments as well as those who wish to use elements of online teaching in their face-to-face and hybrid courses.

TEDU 663. Facilitating Digital Communication. 3 Hours.
Semester course; 3 lecture hours; 3 credits. The heart of online courses exists in communication: between instructors and students and among the students themselves. This communication requires strong writing and facilitation skills. This course will provide an overview of research related to online course communication as well as practical application for facilitating communications in online courses. Participants in the course will learn how to develop online discussions, employ a variety of techniques to encourage discussions, utilize a variety of tools to support discussion and moderate online conflict to create a healthy online learning environment. Activities will include analysis of online discussions to identify various discussion techniques, work in small groups to guide discussions and learning, respond to scenarios related to solving online conflict and experiment with Web-based discussion tools.

TEDU 664. Instructional Design of Online Environments. 2 Hours.
Semester course; 2 lecture hours; 2 credits. This course emphasizes a systematic instructional planning process for online teaching and was created based on the idea of the technological pedagogical content knowledge model. Students will learn how effectively they can prepare their online teaching through a systematic instructional planning process and the use of effective technology integration for pedagogy around their specific subject matter. Students will explore both basic concepts and applied examples in accordance with each step of the online instructional planning processes.
TEDU 665. Assessment and Evaluation in Online Environments. 1 Hour. Semester course; 1 lecture hour; 1 credit. Providing in-depth assessment and evaluation in online courses can be one of the most challenging parts of teaching and learning online. How does the instructor provide creative and useful assignments that incorporate Web-based tools and require students to demonstrate their learning in authentic ways? This course will provide an overview of formative and summative assessment techniques as they relate to online teaching and learning and provide participants with opportunities to practice those skills.

TEDU 666. Content Focus Workshop. 1 Hour. Semester course; 1 workshop hour; 1 credit. Effective technology integration requires an understanding of all aspects of teaching including content, pedagogy and technology. Participants in this course will be introduced to the TPACK model that focuses on the knowledge needed to make effective choices for the use of technology to support content-based instruction. In addition, they will learn about activity types as tools for planning pedagogically sound instruction. Students will practice using the model and the activity types to develop technology enhanced curriculum using the framework.

TEDU 667. Course Development Practicum. 3 Hours. Semester course; 3 practicum hours; 3 credits. This course provides participants with collaborative support and guidance to effectively utilize the knowledge and skills gained from prerequisite courses in foundations of online teaching, facilitating digital communications, instructional design, and assessment and evaluation. Practicum participants will work with a group of peers and the course instructor to finalize the development of their online course.

TEDU 668. Time and Course Management for Online Learning. 1 Hour. Semester course; 1 lecture hour; 1 credit. Teaching and learning online makes different demands on both instructors and participants than the traditional face-to-face experience. In particular, working asynchronously means that instructors and participants must learn new ways of communicating – with both the instructor and other students. One important role of the instructor is to help participants navigate this online learning environment, including developing appropriate time-management skills for discussion participation and assignment completion and managing student expectations related to instructor support and feedback. Participants in this course will develop policies and procedures to use as part of their online courses.

TEDU 669. Online Course Facilitation Practicum. 3 Hours. Semester course; 3 practicum hours; 3 credits. In this practicum experience, participants will facilitate an online learning course with the guidance of an experienced mentor. The exact details of the experience will be dependent on each participant’s situation. Participants will collaboratively work together to reflect on various aspects of the experience to identify best practices, hurdles and other aspects of the experience.

TEDU 672. Internship. 4 Hours. Semester course; 4 hours. 4 credits. May be repeated for a maximum of 12 credits. Prerequisites: passing scores on Praxis II examination and Virginia Communication and Literacy Assessment and permission of adviser. Study and integration of theory with practice in clinical or off-campus settings supervised by an approved professional and university faculty. May include seminars, selected readings, projects and other activities designed and evaluated by supervising faculty.

TEDU 673. Technology Leadership and Staff Development. 3 Hours. Semester course; 3 lecture hours. 3 credits. Prerequisites: Admission to IT certificate or master’s in curriculum and instruction program, or permission of instructor. Emphasis on professional preparation in educational technology leadership; studies of and experiences with leadership, staff development, and supervisory concepts and skills as they relate to the use of technology in K-12 education. Participation in field experience to observe the use of technology to support instruction required.

TEDU 674. Internship II. 1-6 Hours. Semester course; full time, eight weeks. 1-6 credits. Prerequisites: passing scores on Praxis II examination and Virginia Communication and Literacy Assessment and permission of adviser. Study and integration of theory with practice in clinical or off-campus settings supervised by an approved professional and university faculty member. May include seminars, selected readings, projects and other activities designed and evaluated by supervising faculty.

TEDU 675. Internship in ESL. 3 Hours. Semester course; 3 field experience hours (150 contact hours). 3 credits. Enrollment requires permission of instructor. The ESL internship serves as an integrative application experience. Candidates are expected to implement a planned internship project with English language learners, apply knowledge in their area of focus within the field of ESL/TESOL education and demonstrate their ability to be a critically reflective practitioner. This course includes site-based requirements. Graded as Pass/Fail.

TEDU 680. Externship Proposal Seminar. 3 Hours. Semester course; 3 lecture hours. 3 credits. Prerequisites: enrolled in M.I.S. degree, mathematics specialist track, approval of externship goals by faculty specialist. Develops and refines the skills applicable to the preparation of an acceptable draft of an externship proposal.

TEDU 681. Investigations and Trends in Teaching. 1-3 Hours. Semester course; 1-3 lecture hours (delivered online, face-to-face or hybrid). 1-3 credits. May be repeated for a maximum of nine credits. A course designed to familiarize educational professionals with recent trends and developments in course content, strategies for organizing learning experiences and presenting material. Laboratory experience may be incorporated where appropriate. Students must contact their adviser for information regarding which section to register for based on their program.

TEDU 682. Curriculum Development in Science Education. 3 Hours. Semester course; 3 lecture hours. 3 credits. A course for science teacher-developed curriculum innovations that emphasize the initiation of formal and informal classroom work on current scientific trends, as well as special class work and laboratory programs.

TEDU 683. ESL Assessment and Trends. 3 Hours. Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Provides future ESOL teachers with the ESL trends and assessment practices in K-12 settings including specific skills regarding instruction, evaluation, assessment and test construction for English learners. Examines policies that influence assessment and the role of standards in assessment.
TEDU 700. Externship. 1-6 Hours.
Semester course; 1-6 credits. May be repeated for a maximum of 9 credits. Prerequisite: Permission of department. Plan of work designed by extern with prior approval of the offering department. State certification or equivalent may be required for some externships. Off-campus planned experiences for advanced graduate students designed to extend professional competencies, carried out in a setting, under supervision of an approved professional. Externship activities monitored and evaluated by university faculty. Graded P/F.

TEDU 702. National Board Certification II and Externship. 3 Hours.
Semester course; 3 credits. Prerequisite: TEDU 602 with a minimum grade of B. Apply advanced analysis and reflection on teaching practice, culminating in the completion of a portfolio that provides evidence of meeting national teaching standards. Conduct externship.

TEDU 730. Teacher Education and Professional Development. 3 Hours.
Semester course; 3 lecture hours. 3 credits. In this course, students will critically analyze theory and research on teacher education for pre-service teachers and professional development for practicing teachers. Students will explore various conceptions of the teaching profession, the history of teacher education in the United States, debates on how best to educate teachers, and how teacher education and professional development can contribute to more equitable, just and inclusive education. This course cannot be used to meet a requirement for endorsement as a supervisor of instruction in Virginia.

TEDU 731. Exploring Research in Classrooms. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 617.
Enrollment is restricted to graduate students. The purpose of the course is to provide students with an overview of classroom-based research, particularly from the socio-cultural tradition. This course explores research on the classroom through recent and classic works of theory and empirical studies of teaching and learning. Throughout the course, students will engage the tension between educational ends (educational theory, institutional goals and teachers’ goals) and students’ needs and desires.

TEDU 732. Advanced Seminar in Curriculum Studies. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Completion of TEDU 617 is recommended prior to enrollment. Designed to engage doctoral students in a range of readings, writings, discussions and other experiences that address the questions: What should be taught in schools? and Why? The course builds on earlier course work that examines curricular movements and frameworks, and considers contemporary approaches to curriculum study and the implications and effects of their epistemic and philosophical stances -- regarding the nature of knowledge, learners, schools and society -- on instruction.

TEDU 780. Researching Lived Experience: Post Phenomenology. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: EDUS 711, NURS 770, SWKD 704, SBHD 638 or equivalent basic qualitative research course or with permission of the instructor. This advanced qualitative research course focuses on “sensitive” approaches to the study of lived experience (phenomenology) before it is reduced by reflection to words and even before lived experience is felt or emerges as “an experience” (posthumanism). In this course, cherished qualitative notions — validity, experience, subjectivity, coding, thematic analysis, identity, voice, language, etc. — are interrogated, and rigor is invested in an open style of wondering, engaging, writing and creating that transcends the authority of an author acting on its own. The course is conceptually grounded in continental philosophy. Lively philosophical passages and research studies — drawn from feminism, affect theory, critical theory and other fields — are augmented with activities that keep concepts vibrant, immediately useful and dynamically in play throughout the semester. Crosslisted as: EDUS 780.

TEDU 798. Thesis. 1-6 Hours.
Semester course; 1-6 credits. May be repeated for a maximum of 6 credits. A research study of a topic or problem approved by the student’s supervisory committee and completed in accordance with acceptable standards for thesis writing.