TEACHER EDUCATION (TEDU)

TEDU 101. Introduction to Teaching. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Provides undergraduate students with an introduction to teaching and learning in elementary settings. Students will explore current educational reforms and their influences on elementary schools and students. Service-learning activities will enable students to gain firsthand experiences in urban elementary classrooms.

TEDU 102. Health Education as a Discipline. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course is designed to provide students with a basic understanding of health behavior theories, valid sources of information and tools for assessing school health needs. Community health issues and health advocacy are also examined.

TEDU 103. Lifetime Fitness, Wellness and Nutrition for the Health and Physical Educator. 3 Hours.
Semester course; 3 lecture hours (delivered hybrid or face-to-face). 3 credits. This course is designed to provide health and physical educators the foundational knowledge specific to concepts related to the health- and skills-related components of fitness, functional fitness, energy balance and overall well-being. The course will provide an overview of the necessary skills needed to develop smart goals for personal fitness, nutrition and wellness.

TEDU 200. Motor Learning and Performance. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Students will be introduced to the major concepts of motor control and motor learning and influencing conditions. The course will provide a framework for understanding the structure and function of the nervous system in relation to perception and motor control. Other topics include the general nature of skill acquisition and how learners interact with the environment while performing motor tasks. The theoretical framework underlying learning and memory are related to the acquisition of motor skills.

TEDU 201. Assessment and Technology in Health and Physical Education. 2 Hours.
Semester course; 2 lecture hours. 2 credits. This course provides students with the theoretical foundation for assessment in health and physical education. Students will utilize multiple data sources, develop rubrics and analyze available technologies for assessment within each of the domains of K-12 health and physical education. Students will design lessons utilizing technology with the purpose of enhancing the curriculum.

TEDU 202. Health Education Content. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. This course focuses on health promotion and the prevention of injury and disease. Students will also examine healthy relationships as well as mental and emotional health.

TEDU 203. Focus on Choice. 1-3 Hours.
Semester course; variable hours. 1-3 credits. May be repeated for a maximum of 3 credits. A career planning experience for adults focusing on discontinuity in life patterns and a review of current educational and occupational opportunities. Consideration of the world of work, fields of education and volunteer service, and the development of one's own potential will be featured.

TEDU 204. Outdoor Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course is designed to examine the principal philosophical foundations of adventure theory and outdoor educational leadership. Concepts of judgment, decision-making, leadership and environmentally correct practices are introduced. Cooperative and team-building practices will be emphasized as a way to promote increased collaboration, communication, critical thinking and creativity while in the health and physical education environment. Students will learn pedagogical skills needed to teach a number of outdoor education activities, including a variety of teaching styles, the development of lesson plans, assessment in the four domains of physical education and the use of basic class management skills.

TEDU 205. History and Philosophy of Health and Physical Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course has been designed to provide an overview of the professional aspects of health and physical education. Specifically, the course provides students with knowledge of the historical role of health and physical education; acquaints them with the different domains that fit under the "physical education" umbrella and within the health professions; informs them of opportunities present at VCU and in the greater community in the health and physical education fields; and provides information about the full spectrum of career choices in physical education and health. Students will also spend one hour a week in a public school setting.

TEDU 207. Urban Awareness and Urban Education. 3 Hours.
Semester course; 3 lecture hours (delivered in hybrid format). 3 credits. This course is designed to enhance students’ knowledge of urban schools through the examination of historical, economic, political and socio-cultural frameworks that explore how issues of race, class, gender and immigration status have affected the distribution of equal educational opportunities in urban schools in the United States. Diversity in human experiences will be examined within urban cultures and educational settings. Students will engage with research and various literature about inequities in urban schools but also investigate the complexity and challenges of providing excellent education in urban school contexts. The research projects and class book discussions will provide an understanding of communities, their resources, demographics and economy in urban settings that affect education in various ways.

TEDU 210. Debunking Classroom Myths: How and Why Do We Learn Ideas Incorrectly?. 3 Hours.
Semester course; 3 lecture hours (delivered in hybrid format). 3 credits. Ever wonder why concepts are taught over and over and are still difficult to explain? This course explores misconceptions commonly learned in K-12 math, science, humanities and social sciences. Students will investigate these ideas through the lens of their own experiences and what is known about how people learn. This course builds understanding of best practices in learning through reading, discussion, reflection and presentation.

TEDU 211. Censored in School: Banned Books. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course explores books that have been censored or challenged in America’s public schools (mostly grades 6-12). Students will read censored books and learn how and why those books were targeted by people on the political right and the political left. By reading censored books and by studying efforts to remove these books from public schools, students will clarify their own views of censorship and learn about the politics of education in a democratic society.
TEDU 212. Creating Digital Art and Music Through Computer Coding. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. This course provides an introduction to design and creativity through the use of computers to create art and music. The goal of the course is to provide an introduction to creativity at the intersection of technology and the arts. The first half of the course focuses on digital art and the second half of the course focuses on digital music. Digital animations are woven throughout the course. During this course students will create original visual and musical artifacts through computer programming. This course is designed for novices in both music/art composition and computer programming. No previous computer programming experience is required.

TEDU 300. Adapted Physical Education. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. This course is designed to prepare future teachers and professionals to meet the needs of persons with disabilities in organized health, physical education and activity programs in the school and/or recreational and sport setting. It provides an overview of those disabilities found most frequently in public schools. The course will also help students become critically reflective learners.

TEDU 301. Biomechanics of Teaching Movement Skills. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Students will participate in learning experiences that will lead to the development of fundamental movement skills, i.e., manipulative, locomotor and nonlocomotor. Utilization of basic biomechanical principles will be infused in all topics.

TEDU 302. Elementary Methods of Physical Education. 2 Hours.  
Semester course; 2 lecture hours. 2 credits. This course is designed to enhance student knowledge of and preparation for the teaching of elementary physical education through lecture, practical experience, small-group work and projects. Students will learn how to plan and conduct an elementary program, control the learning environment, effectively discipline children and analyze children's behavior. Students will also learn the characteristics of a good teacher as well as methods to change personal teaching behaviors to increase classroom effectiveness. Students will design and conduct activities which integrate literacy with physical education. To become a more reflective teacher, students will write self-evaluations throughout the semester.

TEDU 303. Teaching Team and Individual Sports for Lifetime Fitness. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Students will develop educational skills and methodology for instruction of team and individual lifetime sports and activities in the gymnasium and outdoor settings. They will learn the pedagogical skills needed to teach these activities, including the use of a variety of teaching styles, the development of lesson plans, the assessment of student knowledge and skill acquisition, and the use of basic class management skills. These pedagogical skills will be applied within the realm of specific sports such as flag football, soccer, tchoukball, team handball, badminton, pickleball and golf.

TEDU 304. Secondary Methods of Physical Education. 2 Hours.  
Semester course; 2 lecture hours. 2 credits. This course is designed to prepare students for student teaching. Students will learn pedagogical skills including the use of a variety of teaching styles, the development of lesson plans and unit plans, the assessment of student knowledge and skill acquisition, and the use of classroom management skills. In addition, students will gain insight into the development of a physical education curriculum as influenced by philosophies, models, issues and trends. Elementary, middle and high school levels are included in discussions. Students will also learn how to integrate literacy into the physical education curriculum. A major emphasis will be to prepare students as critical reflective practitioners by learning how to evaluate the teaching/learning situation and make appropriate changes. In that regard, students will learn how to design and analyze instruments that help them in this evaluation.

TEDU 305. Concepts of Peer Health Education. 3 Hours.  
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. This course is designed to provide students with the theoretical and practical foundations to design, implement and evaluate best practice peer-to-peer education related to health and well-being. Students will learn and practice concepts such as active listening, responding to a crisis, and effectively delivering and evaluating peer-to-peer programming. This course also serves as required training for students interested in becoming a peer health educator with VCU’s Recreation and Well-Being department, RecWell.

TEDU 310. Elementary School Practicum A. 2 Hours.  
Semester course; 2 lecture hours. 2 credits. Corequisites: TEDU 410, TEDU 414 and TEDU 426. Restricted to students admitted to the Extended Teacher Preparation Program. A field placement that precedes student teaching/internship. Includes planned observations, tutorials and small-group involvement. Graded pass/fail.

TEDU 311. Middle School Practicum. 2 Hours.  
Semester course; 2 lecture hours. 2 credits. Corequisite: TEDU 537. Restricted to students admitted to the Extended Teacher Preparation Program. A field placement that precedes student teaching/internship. Includes planned observations, tutorials and small-group involvement. Graded pass/fail.

TEDU 312. High School Practicum. 1 Hour.  
Semester course; 1 lecture hour. 1 credit. Pre- or corequisite: TEDU 311; corequisite: TEDU 540, 545, 547 or 548. Restricted to students admitted to the M.T. program with concentrations in secondary education. A field placement that precedes student teaching/internship. Includes planned observations, tutorials and small-group involvement. Course graded as pass/fail.

TEDU 313. Elementary School Practicum B. 2 Hours.  
Semester course; 2 practicum hours. 2 credits. Prerequisite: TEDU 310. Corequisites: TEDU 517, TEDU 522 and TEDU 591. Enrollment is restricted to students admitted to the M.T. program with a concentration in early and elementary education. A field placement that precedes student teaching/internship. Includes planned observations, tutorials and small-group and whole class involvement. Graded as pass/fail.
TEDU 314. Practicum for Health and Physical Education. 2 Hours.
Semester course; 2 practicum hours. 2 credits. Prerequisites: TEDU 103 and TEDU 303. Enrollment is restricted to students admitted to teacher preparation in the B.S.Ed. in Health and Physical Education program or students enrolled in the minor in recreation and wellness. A field placement in health and physical education that precedes student teaching/internship. This field placement includes planned observations, tutorials and small-group and whole class involvement. Graded as pass/fail.

TEDU 320. ACE Prep Group Exercise. 3 Hours.
Semester course; 3 lecture hours (delivered face-to-face or hybrid). 3 credits. This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in group fitness instruction. Topics include guidelines for instructing safe, effective and purposeful exercise; essentials of the instructor–participant relationship; principles of motivation to encourage adherence in the group fitness setting; effective instructor-to-participant communication techniques; methods for enhancing group leadership; and the group fitness instructor's professional role.

TEDU 321. ACE Prep Personal Training. 3 Hours.
Semester course; 3 lecture hours (delivered face-to-face or hybrid). 3 credits. This course is designed to give students the knowledge and understanding necessary to prepare for the ACE Personal Trainer Certification Exam and become effective personal trainers. This course presents a client-centered approach to personal training that features the ACE Integrated Fitness Training model as a comprehensive system for designing individualized programs based on each client's unique health, fitness and performance goals and the ACE Mover Method philosophy for empowering clients to make behavioral changes to improve their health, fitness and overall quality of life. The information covered by this course can be directly applied in all settings by using the ACE ABC Approach to navigate all client interactions by asking powerful open-ended questions, breaking down barriers and collaborating on goals every step of the way. The ACE IFT model and ACE Mover Method philosophy will help students learn how to facilitate rapport, adherence, self-efficacy and behavior change in clients, as well as design exercise programs that help clients improve posture, movement, flexibility, balance, core function, cardiorespiratory fitness and muscular fitness.

TEDU 322. Learn to Swim. 1 Hour.
Semester course; 1 lecture hour. 1 credit. This class is designed to help participants gain basic aquatic skills and swimming strokes, including the front crawl, breaststroke and elementary backstroke. Participants also learn skills and concepts needed to stay safe around the water, in addition to those needed to help themselves or others in an aquatic emergency. Graded as pass/fail.

TEDU 323. Swimming for Fitness. 1 Hour.
Semester course; 1 lecture hour. 1 credit. This course is designed to improve participants' proficiency in basic aquatic skills and six basic swimming strokes. This class will also work on refining participants' strokes and turns and build endurance for fitness swimming. Participants also learn skills and concepts needed to stay safe around the water. Graded as pass/fail.

TEDU 324. ARC Lifeguard. 2 Hours.
Semester course; 2 lecture hours. 2 credits. Enrollment requires permission of the instructor. This course is designed to provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide professional-level care for breathing and cardiac emergencies, injuries and sudden illnesses until emergency medical services personnel take over. Graded as pass/fail.

TEDU 325. ARC Water Safety Instructor. 2 Hours.
Semester course; 2 lecture hours. 2 credits. Enrollment requires permission of the instructor. This course is designed to train instructor candidates to teach courses and presentations in the American Red Cross Swimming and Water Safety Program by developing their understanding of how to use course materials, how to conduct training sessions and how to evaluate participants' progress. Graded as pass/fail.

TEDU 326. Introduction to Mindfulness and Leading With Compassion. 2 Hours.
Semester course; 2 lecture hours (delivered face-to-face or hybrid). 2 credits. In this course, students will learn skills to lead compassionately through mindfulness and self-reflection. The first half of this course will focus on pedagogy related to mindful practice, as well as ways to lead through empathy, tough conversations and authenticity. The second half of the course will focus on facilitation, with students facilitating mindful practice for their peers each week. With this course completion, students will receive the title of mindful ambassadors with VCU's Recreation and Well-Being department, RecWell, where they will be qualified to facilitate mindful exercises for partners on campus.

TEDU 381. Middle School Practicum for Engineering Education. 2 Hours.
Semester course; 2 practicum hours. 2 credits. Corequisites: TEDU 382, TEDU 413 and TEDU 420. Enrollment is restricted to students in the B.S.Ed. in Secondary Education and Teaching with a concentration in engineering education program. A field placement that precedes student teaching/internship. Includes planned observations, tutorials and small-group involvement. Graded as pass/fail.

TEDU 382. High School Practicum for Engineering Education. 1 Hour.
Semester course; 1 practicum hour. 1 credit. Corequisites: TEDU 381, TEDU 413 and TEDU 420. Enrollment is restricted to students in the B.S.Ed. in Secondary Education and Teaching with a concentration in engineering education program. A field placement that precedes student teaching/internship. Includes planned observations, tutorials and small-group involvement. Graded as pass/fail.

TEDU 385. Teaching Writing Through Children's Literature. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. This course will focus on the art of teaching writing through the use of quality children's literature. The course is designed to give students an appreciation of the value of children's literature, examine current trends and explore the use of literature across the genres as tools for developing readers and writers. In addition, students will learn to construct a successful community of writers in PK and elementary classrooms. Students will critically examine theory, techniques and strategies in the context of how children learn to think and write. A focus on pedagogical and rhetorical theory will include an examination of personal writing processes.

TEDU 386. Children's Literature I. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. This course is designed to give students an appreciation of the value of children's literature, present a look at current trends and provide a wide range of reading from different literary genres and diverse authors. The course will also explore the creative use of literature and its contribution to the development of oral and written expression in children from birth to grade 6. Throughout the course students will develop skills as educators who are critically reflective practitioners. Crosslisted as: ENGL 386.
TEDU 387. Literature for Adolescents. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: ENGL 201, 202, 203, 204, 205, 206, 211, 215, 236, 291 or 295. Designed to acquaint the prospective middle and secondary school English teacher with the nature, scope and uses of adolescent literature. The student is acquainted with reading materials for meeting the varied needs and interests of adolescents.

TEDU 389. The Teaching of Writing Skills. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course will focus on the art of teaching writing through a writer’s workshop approach. The course will critically examine theory, techniques and strategies in the context of how students learn to think and write in K-12 classrooms. The class will also address issues of assessing and responding to student writing, and it includes extensive journal and essay writing with an examination of the student’s own personal writing processes. Students will be encouraged to be critically reflective practitioners throughout the course. Crosslisted as: ENGL 389.

TEDU 390. Movement Education. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours (delivered online, face-to-face or hybrid). 3 credits. Prerequisite: TEDU 101. This service-learning course will examine the physiological changes that occur in the brain as a result of moderate physical activity and the relationship to increased cognition. Students will also examine how to develop movement-based lessons to complement existing curricula across all content areas. Students enrolled in this course will receive a movement education certification upon completion of the course requirements.

TEDU 400. Independent Study. 1-6 Hours.
Semester course; 1-6 hours. 1-6 credits. Opportunities are provided for supervised research and independent study in selected areas. Designed for advanced students. All work offered on an individual basis with the approval of instructor and departmental chair.

TEDU 402. Becoming a Health and Physical Education Professional. 1 Hour.
Semester course; 1 lecture hour. 1 credit. This course is designed to prepare the teacher candidate to bridge from student to student teacher. Activities focus on professional experiences and behaviors.

TEDU 403. Teaching Health Education. 2 Hours.
Semester course; 2 lecture hours. 2 credits. This course has been designed to prepare students to think critically and become independent problem-solvers and decision-makers by applying previously acquired professional knowledge to curriculum design and instruction in multiple settings. Students will learn pedagogical skills including the use of a variety of teaching styles, the development of lesson plans and unit plans, the assessment of student knowledge and skill acquisition, and the use of classroom management skills. Students will also gain insight into the development of a health education curriculum as influenced by philosophies, models, issues and trends. Elementary, middle and high school levels are included in discussion.

TEDU 405. Seminar for Student Teaching. 1 Hour.
Semester course; 1 lecture hour. 1 credit. Corequisites: TEDU 493 and TEDU 495. This seminar is "attached" to the student teaching internship in the schools and is intended as a companion piece to that semester experience. Issues, including those which have been identified by members of the seminar, as well as issues that arise in the classroom and those that are of perennial concern to teachers of health and physical education are the basis for this class. The teacher as the critically reflective educator is the focus of this seminar: what choices the teacher has in the classroom and what effect those choices have upon student learning.

TEDU 410. Building a Community of Learners: Classroom Management. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: EDUS 301, PSYC 301 or PSYC 304 with a minimum grade of C. The course is designed to encompass pre-K through grade 12 classroom management theory and application, motivation theory and application, diversity, socio-emotional development, trauma-informed care, and restorative justice for regular education and special education students. Crosslisted as: SEDP 410.

TEDU 411. Integrating the Arts in Curriculum for Young Children. 2 Hours.
Semester course; 2 lecture hours. 2 credits. Provides pre-service teachers with an understanding of how experiences in visual art, music, drama and movement can be used to support the growth and development of children in pre-K through 5th grade. Students will learn of the importance of all of the arts for children’s cognitive, socio-emotional and psychomotor development. Emphasis will be given to integrating developmentally appropriate experiences in the arts into early childhood curriculum.

TEDU 413. Curriculum Methods and Instructional Models. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Prerequisites: EDUS 202; and EDUS 301, PSYC 301 or PSYC 304, both with a minimum grade of C. A study of developmentally appropriate curriculum and instructional models for PK-12 children. The course includes the study of curriculum, a variety of instructional models, Virginia Standards of Learning, Virginia’s Foundation Blocks for Early Learning, diversity, assessment, planning and creating positive learning environments.

TEDU 414. Curriculum and Methods for Early/Elementary Children. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisite: admission to teacher preparation program. Corequisites: TEDU 310 (Practicum A) and 426. A study of developmentally appropriate curriculum and methods for early/elementary children, including diversity, assessment, behavior guidance and management, planning instruction and creating positive learning environments. Includes an overview of the history of early/elementary education and issues currently facing the profession.

TEDU 416. Math/Science Methods for Early Childhood Education. 4 Hours.
Semester course; 3.5 hour lecture and .5 hours field experience hours. 4 credits. A combined math and science early and elementary methods course that focuses on the teaching of mathematics and science in a PK through 3rd grade class. The course is a lecture/ hands-on course connected with a practicum experience in a local PK-3rd grade classroom. This course is designed to teach pre-service teachers how to plan, implement and assess strong student-centered mathematics and science lessons in today’s diverse classrooms. Activities and assignments will focus on research-based practices, effectively using a variety of instructional strategies and hands-on experiences to help students develop their understanding of abstract math and science concepts. The class will help to position the pre-service teacher as a reflective decision-maker.

TEDU 417. Early/Elementary Science Methods. 3 Hours.
Semester course; 2.5 lecture and .5 field experience hours. 3 credits. Prerequisite: TEDU 413. Corequisites: TEDU 422 and TEDU 496. An undergraduate course designed to renew and/or expand teachers’ knowledge and skills in the teaching of science in the elementary classroom and the community. New materials will be examined in the light of current trends, research findings and professional recommendations.
TEDU 420. Teaching Middle and High School Engineering. 3 Hours. Semester course; 3 lecture hours. 3 credits. Prerequisite: EDUS 301. Enrollment is restricted to students admitted to teacher preparation or by permission of instructor. Examines the teaching strategies, materials and objectives of engineering education in middle and high schools. Emphasizes the engineering processes, engineering design cycle, integration of science and mathematics into engineering and use of design challenges to engage students in real-world applications of engineering.

TEDU 422. Early/Elementary Math Methods. 3 Hours. Semester course; 2.5 lecture and .5 field experience hours. 3 credits. Prerequisites: MATH 303, MATH 361 and MATH 362; and STAT 206, STAT 208 or STAT 210. Corequisites: TEDU 417 and TEDU 496. An early and elementary mathematics methods course that focuses on the teaching of mathematics in the PK through 6th grade classroom. The course is a lecture/hands on course with 40 hours of in class contact time and a 20 contact hour practicum experience in a local K-5 classroom. This course is designed to teach preservice teachers how to plan, implement and assess strong student-based mathematics lessons in today's diverse classrooms. Activities and assignments will focus on research-based practices, effectively using a variety of instructional strategies and using manipulative to help students discuss their thinking. The class will help to position the preservice teacher as a reflective decision-maker.

TEDU 425. Emergent and Early Literacy. 3 Hours. Semester course; 3 lecture hours. 3 credits. This course provides an introduction to the theories, concepts, pedagogical approaches, methods and materials used to promote early literacy acquisition and development. Within the framework of the stages of literacy development, students will develop competency in the components of emergent literacy, including language development, phonological and phonemic awareness, phonics, fluency, comprehension, vocabulary and writing. Application of course content in preschool and early elementary classrooms will encourage critical reflection on pedagogical approaches as students meet the diverse language and learning needs of young children ages birth to 8.

TEDU 426. Teaching Reading and Other Language Arts. 3 Hours. Semester course; 3 lecture hours. 3 credits. Presents teaching strategies and materials in reading and the other language arts based on current theory and research. Emphasizes the interrelatedness of listening, speaking, reading and writing and the importance of naturalistic language experiences.

TEDU 430. Early Childhood Education Practicum I. 1 Hour. Semester course; 1 practicum hour. 1 credit. Corequisites: TEDU 413 and TEDU 425. Enrollment is restricted to students enrolled in the B.S.Ed. in Early Childhood Education and Teaching program. This practicum experience provides an opportunity for students to observe, learn from and interact with effective school-based educators and students in their early childhood or classroom placement. This course allows VCU teacher candidates opportunities to implement strategies and techniques that are taught in their accompanying methods classes. Students will focus on reflective practice and research-based teaching methods in the area of reading and language arts content. Graded as pass/fail.

TEDU 431. Early Childhood Education Practicum II. 1 Hour. Semester course; 1 practicum hour. 1 credit. Prerequisites: TEDU 425 and TEDU 430. Corequisite: TEDU 466. Enrollment is restricted to students enrolled in the B.S.Ed. in Early Childhood Education and Teaching program. This practicum studies reading problems by focusing on reading diagnosis and intervention related to classroom settings. The course involves evaluating and tutoring individual students with reading difficulties. Emphasis is placed on making decisions based upon students' individual needs and critical reflection to improve instruction.

TEDU 432. Early Childhood Education Practicum III. 1 Hour. Semester course; 1 practicum hour. 1 credit. Prerequisite: TEDU 431. Corequisites: TEDU 416 and TEDU 490. Enrollment is restricted to students enrolled in the B.S.Ed. in Early Childhood Education and Teaching program. A practicum that precedes student teaching/internship. Field work includes planned observations and teaching activities and lessons to small groups and full classes. Graded as pass/fail.

TEDU 440. Elementary Education Practicum I. 1 Hour. Semester course; 1 practicum hour. 1 credit. Prerequisites: TEDU 426 and TEDU 440. Corequisite: TEDU 466. Enrollment is restricted to students enrolled in the B.S.Ed. in Elementary Education and Teaching program. This practicum provides an opportunity for students to observe, learn from and interact with effective school-based educators and students in their elementary classroom placement. This course allows VCU teacher candidates opportunities to implement strategies and techniques that are taught in their accompanying methods classes. Students will focus on reflective practice and research-based teaching methods in the area of reading and language arts content. Graded as pass/fail.

TEDU 441. Elementary Education Practicum II. 1 Hour. Semester course; 1 practicum hour. 1 credit. Prerequisites: TEDU 426 and TEDU 440. Corequisite: TEDU 466. Enrollment is restricted to students enrolled in the B.S.Ed. in Elementary Education and Teaching program. This practicum studies reading problems by focusing on reading diagnosis and intervention related to classroom settings. The course involves evaluating and tutoring individual students with reading difficulties. Emphasis is placed on making decisions based upon students' individual needs and critical reflection to improve instruction.

TEDU 442. Elementary Education Practicum III. 1 Hour. Semester course; 1 practicum hour. 1 credit. Prerequisite: TEDU 441. Corequisites: TEDU 422, TEDU 417 and TEDU 496. Enrollment is restricted to students enrolled in the B.S.Ed. in Elementary Education and Teaching program. A practicum that precedes student teaching/internship. Field work includes planned observations and teaching activities and lessons to small groups and full classes. Graded as pass/fail.

TEDU 452. Teaching English Language Learners. 2 Hours. Semester course; 2 lecture hours. 2 credits. Prerequisite: TEDU 413. This course is designed to help teachers who plan to teach English and other content areas to PK-12 students who are speakers of other languages. The course includes attention to social and cultural contexts, the diversity of emergent bilingual students in the United States, legal and policy contexts, models of ESL programs and advocacy for students. Students will also develop skills in lesson preparation and delivery for emergent bilingual students within ESL classrooms as well as in other content area classrooms.
TEDU 462. Internship I. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisites: TEDU 312, TEDU 410, TEDU 414 and TEDU 420. Corequisites: TEDU 464 and TEDU 481. This internship serves as the teacher candidate's culminating clinical experience. It provides students with an opportunity to demonstrate what they have learned during their professional academic preparation. It also serves as an opportunity for public school and VCU personnel to evaluate and strengthen teacher candidates' application of theory to practice in a secondary classroom.

TEDU 464. Internship II. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisites: TEDU 312, TEDU 410, TEDU 413 and TEDU 420. Corequisites: TEDU 462 and TEDU 480. Enrollment is restricted to students who have received passing scores on VCLA and Praxis II. This internship serves as the teacher candidate's culminating clinical experience. Teacher candidates complete a full-time placement that provides them with an opportunity to demonstrate what they have learned during their professional academic preparation. It also serves as an opportunity for public school and VCU personnel to evaluate and strengthen teacher candidates' application of theory to practice in a secondary classroom.

TEDU 466. Literacy Assessment and Intervention in the Early/Elementary Classroom. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 425 or TEDU 426. Corequisite: TEDU 431 or TEDU 441. Students will examine reading problems by focusing on reading diagnosis and intervention related to classroom settings. Emphasis is placed on making decisions based upon students' individual needs and critical reflection to improve instruction. Throughout the semester, students will develop skills as an educator who is a critically reflective practitioner using the VCU School of Education conceptual framework as a guide. Students will apply skills acquired in this course during a supervised practicum experience in the corequisite course in which students will evaluate and tutor individual students with reading difficulties.

TEDU 471. Internship I (PK-K). 4 Hours.
Semester course; 4 field experience hours. 4 credits. Prerequisites: TEDU 416, TEDU 466 and TEDU 490. Corequisites: TEDU 475 and TEDU 481. Enrollment is restricted to students who have completed the student teaching approval process (including passing scores on VCLA and Praxis II). This internship serves as the teacher candidate's culminating clinical experience. It provides students with an opportunity to demonstrate what they have learned during their professional academic preparation. It also serves as an opportunity for public school and VCU personnel to evaluate and strengthen teacher candidates' application of theory to practice in an early childhood classroom setting. Teacher candidates complete a full-time seven-to-eight-week placement in a PK/K classroom and assume full responsibility for planning and implementing instruction under the tutelage of a cooperating teacher for a minimum of two weeks.

TEDU 472. Elementary Internship I (PK-2). 4 Hours.
Semester course; 4 field experience hours. 4 credits. Prerequisites: TEDU 417, TEDU 422, TEDU 466 and TEDU 496. Corequisites: TEDU 474 and TEDU 481. Enrollment is restricted to students with passing scores on VCLA and Praxis II. This internship serves as the teacher candidate's culminating clinical experience. It provides students with an opportunity to demonstrate what they have learned during their professional academic preparation. It also serves as an opportunity for public school and VCU personnel to evaluate and strengthen teacher candidates' application of theory to practice in an elementary classroom. Teacher candidates complete a full-time seven-to-eight-week placement in a pre-K/kindergarten to 2nd grade classroom.

TEDU 474. Elementary Internship II (Grades 3-5). 4 Hours.
Semester course; 4 field experience hours. 4 credits. Prerequisites: TEDU 417, TEDU 422, TEDU 466 and TEDU 496. Corequisites: TEDU 472 and TEDU 481. This internship serves as the teacher candidate's culminating clinical experience. It provides students with an opportunity to demonstrate what they have learned during their professional academic preparation. In addition it serves as an opportunity for public school and VCU personnel to evaluate and strengthen teacher candidates' application of theory to practice in an elementary classroom. Teacher candidates complete a full-time seven-to-eight-week placement in a 3rd through 5th grade classroom. For this internship there is sometimes an option to be placed in a sixth grade classroom as well.

TEDU 475. Internship II (Grades 1-3). 4 Hours.
Semester course; 4 field experience hours. 4 credits. Prerequisites: TEDU 416, TEDU 466 and TEDU 490. Corequisites: TEDU 471 and TEDU 481. Enrollment is restricted to students who have completed the student teaching approval process (including passing scores on VCLA and Praxis II). This internship serves as the teacher candidate's culminating clinical experience. It provides students with an opportunity to demonstrate what they have learned during their professional academic preparation. It also serves as an opportunity for public school and VCU personnel to evaluate and strengthen teacher candidates' application of theory to practice in an early childhood classroom setting. Teacher candidates complete a full-time seven-to-eight-week placement in a grade 1-3 classroom and assume full responsibility for planning and implementing instruction under the tutelage of a cooperating teacher for a minimum of two weeks.

TEDU 478. Internship I for Engineering Education. 4 Hours.
Semester course; 4 field experience hours. 4 credits. Prerequisites: TEDU 382, TEDU 410, TEDU 413 and TEDU 420. Corequisites: TEDU 479 and TEDU 480. Enrollment is restricted to students who have received passing scores on the VCLA and Praxis II. This internship serves as the teacher candidate's culminating clinical experience. It provides students with an opportunity to demonstrate what they have learned during their professional academic preparation. It also serves as an opportunity for public school and VCU personnel to evaluate and strengthen teacher candidates' application of theory to practice in a secondary classroom.

TEDU 479. Internship II for Engineering Education. 4 Hours.
Semester course; 4 field experience hours. 4 credits. Prerequisites: TEDU 382, TEDU 410, TEDU 413 and TEDU 420. Corequisites: TEDU 478 and TEDU 480. Enrollment is restricted to students who have received passing scores on the VCLA and Praxis II. This internship serves as the teacher candidate's culminating clinical experience. Teacher candidates complete a full-time placement that provides an opportunity to demonstrate what they have learned during their professional academic preparation. It also serves as an opportunity for public school and VCU personnel to evaluate and strengthen teacher candidates' application of theory to practice in a secondary classroom.

TEDU 480. Investigations and Trends in Teaching: Engineering. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Corequisites: TEDU 462 and TEDU 464. This course is a companion to the student internship in secondary education. Its major purposes are to cultivate the knowledge, dispositions and skills of a critically reflective practitioner into actual teaching practice. To do so, this class provides opportunities for interns to describe, analyze and evaluate the curricular, instructional and management decisions they make during their internship. The course also focuses on professionalism and ethical standards, as well as personal integrity in the teaching profession.
TEDU 481. Teaching as a Profession. 2 Hours.
Semester course; 2 lecture hours (delivered online, face-to-face or hybrid). 2 credits. Prerequisite: TEDU 432 or TEDU 442. Corequisites: TEDU 472 and TEDU 474; or TEDU 471 and TEDU 475. This course is a companion piece to the student internship in elementary education. Its major purposes are to cultivate the knowledge, dispositions and skills of a critically reflective practitioner into actual teaching practice. To do so, this class provides opportunities for interns to describe, analyze and evaluate the curricular, instructional and management decisions they make during their internship. The course also focuses on professionalism and ethical standards, as well as personal integrity in the teaching profession.

TEDU 483. Second Language Acquisition: Concepts, Curriculum and Assessment. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course is designed as an introduction to the processes of second language acquisition, with a focus on SLA theories and concepts and how they apply in classroom settings. The course addresses the application of SLA theories, principles and current research to the use of curriculum and assessment. In-depth analysis of readings will enhance the students’ understanding of SLA and the research related to this field. Students examine videos of classroom teaching, analyzing the application of SLA theories utilized in various instructional settings.

TEDU 485. Directed Student Teaching I. 6 Hours.
6 credits. Prerequisites: admission to TEDU 310 or equivalent with a minimum grade of C, recommendation of practicum supervisor and passing score on the VCLA test. A classroom teaching experience in a public school or other approved setting, which includes opportunities for increasing involvement with children. Culminates in full responsibility for planning, implementing and evaluating classroom activities.

TEDU 486. Directed Student Teaching II. 6 Hours.
6 credits. Prerequisites: admission to TEDU 310 or equivalent with a grade of C or better and recommendation of practicum supervisor. A classroom teaching experience in a public school or other approved setting, which includes opportunities for increasing involvement with children. Culminates in full responsibility for planning, implementing and evaluating classroom activities.

TEDU 490. Social Studies Methods for Early Learners. 2 Hours.
Semester course; 1.75 lecture and .25 field experience hours. 2 credits. This course’s design is centered on helping the pre-service PK-3 early childhood/elementary teacher examine the purpose of social studies education, the connections between social studies and other curricular areas, and the persisting issues in social studies education, and to do it in an equitable way for all learners. The course will introduce students to an integrative reflective planning process and a variety of instructional strategies and materials. Its ultimate goal is to prepare students to understand the role of the teacher as a reflective decision-maker.

TEDU 493. Field Experience I. 4 Hours.
Semester course; 4 field experience hours. 4 credits. Enrollment is restricted to students who have been admitted to teacher education and have passing scores on VCLA; Praxis I and Praxis II. An in-depth field experience in a public school, health education/health promotion agency or other approved setting. Students will complete a full-time seven-to-eight-week placement teaching in the PK-5 health and physical education setting. This practical experience will lead to greater practical application of skills culminating in full responsibility for planning, implementing and evaluating the classroom. Consult with adviser to obtain a course syllabus regarding prerequisites and specific course requirements. Fulfills capstone requirement.

TEDU 494. Topical Seminar in Education. 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 personnel interested in examining topics, issues or problems related to the teaching, learning and development of students.

TEDU 495. Field Experience II. 4 Hours.
Semester course; 4 field experience hours. 4 credits. Enrollment is restricted to students who have been admitted to teacher education and have passing scores on VCLA, Praxis I and Praxis II. Addresses competencies in health and physical education. Provides experiences at an approved affiliate site under the supervision of faculty and approved site supervisors. Students will gain practical experience by completing a full-time seven-to-eight-week placement teaching in grades 6-12 in a health and physical education setting.

TEDU 496. Early/Elementary Social Studies Methods. 3 Hours.
Semester course; 2.5 lecture and .5 field experience hours. 3 credits. Prerequisite: TEDU 413. Corequisites: TEDU 417 and TEDU 422. This course’s design is centered on helping the PK-6 teacher examine the purpose of social studies education, the connections between the discipline of social studies and other curricular areas, and the persisting issues in social studies education in an equitable way for all learners. The course will introduce students to an integrative reflective planning process and a variety of instructional strategies and materials. Its ultimate goal is to prepare students to understand the role of the teacher as a reflective decision-maker.

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 hours (delivered online, face-to-face or hybrid). 2 credits. Enrollment is restricted to students in the RTR program. This course is centered on helping participants in the RTR program to examine the purpose of social studies education, the connections between the social studies discipline and other curricular areas and the persisting issues in social studies education, including local government and civics instruction. It will introduce students to an integrative reflective planning process and a variety of instructional strategies and materials.

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.

TEDU 522. Teaching Mathematics for Elementary Education. 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 or permission of instructor. Corequisites: TEDU 310 (Practicum B), 517 and 591. Emphasis on current instructional strategies, learning theories and manipulative materials appropriate for teaching mathematics to children. The content focus is on the primary and elementary grades.

TEDU 523. Implementing and Administering Programs for Young Children. 3 Hours. Semester course; 3 lecture hours. 3 credits. Provides the student with fundamental knowledge and skills in the implementation, supervision and administration of educational programs in schools, centers and homes for infants and young children. A problems approach will be utilized with emphasis on creative management and evaluative processes.

TEDU 524. Cross-cultural Perspectives in Child Rearing and Early Education. 3 Hours. Semester course; 3 lecture hours. 3 credits. Analysis of the impact of linguistic patterns, child-rearing techniques and socialization processes on the education of young children in various cultural settings.

TEDU 525. Teaching Language Arts. 3 Hours. Semester course; 3 lecture hours. 3 credits. Teaching techniques and materials for the developmental teaching of communication skills. Students will explore significant research and current literature related to content, organization and instruction in language arts for the elementary and middle schools.

TEDU 526. Word Study. 3 Hours. Semester course; 3 lecture hours. 3 credits. Integrates the linguistic, historical, theoretical and research bases of developmental spelling and word knowledge (phonics, phonemic awareness and vocabulary). A primary focus is on the stages of spelling development, including assessment and instruction of orthographic knowledge at each stage.

TEDU 528. Children's Literature II. 3 Hours. Semester course; 3 lecture hours. 3 credits. A study of classic and current children's books from a variety of literary genres. Magazines and media-related reference resources and journals are reviewed. The creative use of literature, its sociocultural functions and its contribution to the development of the oral and written expression of children from nursery to grade eight are explored. A focus on children with special problems is included. May not be taken for credit toward undergraduate English major if student has taken ENGL 351/TEDU 351. May not be used to fulfill literature requirement for M.A. in English or M.F.A. in Creative Writing, but may be taken as elective credit. Crosslisted as: ENGL 528.
TEDU 531. Media Literacy in the K-12 Classroom. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Offered in online and  
traditional formats. Explores the role of media in society and methods  
for incorporating media literacy instruction in the K-12 school classroom.  
Participants will study the foundations of media literacy, critical thinking  
and the ways media shapes our views of culture, society and education.  
Through hands-on activities and projects, participants will become  
familiar with a variety of media tools and instructional methods for  
utilizing media to support student learning. Participants will research  
methods for assessing student learning when using paper-based and  
digital media.

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 537. Inclusive Curriculum in Secondary Schools. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Studies the background  
and objectives of the contemporary secondary school; basic issues,  
current trends and practices in curriculum construction and instructional  
planning are examined with an emphasis on the inclusion of students  
with different abilities and disabilities.

TEDU 540. Teaching Middle and High School Sciences. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Prerequisites: EDUS 301 and  
admission to teacher preparation or permission of instructor. Examines  
the teaching strategies, materials and objectives of the sciences in  
middle and high schools. Emphasizes the nature of science in science  
instruction, teaching of experimental design and translating science  
education research into teaching practices.

TEDU 544. Introduction to the Middle School. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. An examination of the nature  
and capabilities of the middle school student, the school environment,  
teacher characteristics, instructional modes, the curriculum and the  
future of the middle school movement.

TEDU 545. Teaching Secondary School Mathematics. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Prerequisites: upper-division  
mathematical sciences major or EDUS 301 and admission to teacher  
preparation or permission of instructor. Examines materials, resources,  
innovations, procedures, methods, equipment and learning principles  
appropriate for decision-making related to the teaching of secondary  
mathematics.

TEDU 546. Teaching Foreign Language. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. The goal of the course is  
to provide pre-service and in-service teachers with the theoretical and  
practical strategies necessary for successful foreign language teaching  
in K-12 school settings. This course offers a comprehensive approach to  
designing curriculum, instruction and assessment for foreign language  
programs in the schools.

TEDU 547. Teaching Secondary School Social Studies. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Examines demands involved  
in secondary social studies instruction; preparatory approaches to  
using academic and professional insights in confronting the demands;  
formulating and implementing appropriate methodological approaches.

TEDU 548. Teaching Secondary School English. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Prerequisites: EDUS 301 and  
admission to teacher preparation or permission of instructor. Studies  
teaching strategies, materials and objectives for literature, language and  
composition; developing and organizing English instruction; applying  
learning theory; examining evaluation strategies; questioning techniques;  
and classroom management.

TEDU 549. Diagnostic Reading in the Secondary School. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Prerequisite: TEDU 561  
or 562 or permission of instructor. For prospective and practicing  
secondary school teachers. Studies diagnostic teaching of reading and  
techniques to help struggling readers in grades 6 through 12, as well  
as the role of the secondary reading specialist in reading instruction.  
Reading levels and selection of appropriate materials are considered.  
Various techniques and strategies for improving reading are investigated.  
Emphasis on evaluation of reading progress, differentiation of instruction,  
reading difficulties, and diagnostic and prescriptive procedures. Course  
techniques are practiced with students in grades 6 through 12.

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.  
Present 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 lecture hours. 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 605. Developing and Critiquing Visual Literacy. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Develops the technology instructional resource. Assessment and evaluation of the effectiveness and appropriateness of the use of media. Understands the development of 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 (delivered online, face-to-face or hybrid). 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 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 K12 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.