CURRICULUM & INSTRUCTION (CURR)

CURR 517 Teaching and Learning Number and Operations 3 Credits
This course provides an in-depth study of the content and pedagogy for understanding early number theory. It addresses students' mathematical understanding of representing numbers, relationships among numbers, and number systems; operations and how they relate to one another; and computation. Strong emphasis is placed on the cognitive development of children's thinking in number and operations, and the instructional, curricular, and assessment implications for teaching. The course includes the NCTM Principles of problem solving, reasoning and proof, connections, communication, and multiple representations and the Common Core State Standards for Mathematics Practices.

CURR 518 Teaching and Learning Rational Numbers and Proportional Reasoning 3 Credits
This course provides an in-depth study of the content and pedagogy for understanding rational numbers and proportional reasoning. Content includes a variety of situations involving proportions, for example, real-world problems involving ratios, rates, and percents; geometry involving similarity; algebra involving linearity; and probability involving assigning a probability to an event. Distinguishing proportional situations from those that are not and reasoning proportionally in appropriate situations are emphasized. Emphasis is placed on children's cognitive development of rational numbers and proportional reasoning, and the instructional, curricular, and assessment implications for teaching. The course includes the NCTM Principles of problem solving, reasoning and proof, connections, communication, and multiple representations and the Common Core State Standards for Mathematics Practices.

CURR 519 Teaching and Learning Algebraic Reasoning 3 Credits
This course provides an in-depth study of the content and pedagogy necessary to facilitate the transition from concrete arithmetic reasoning to abstract algebraic reasoning. It addresses students' mathematical understanding of equality, variable, generalization, and functions; cognitive development of algebraic reasoning; and the instructional, curricular, and assessment implications for fostering algebraic reasoning in students. Strong emphasis is placed on the NCTM Principles of problem solving, reasoning and proof, connections, communication, and multiple representations and the Common Core State Standards for mathematics content and mathematical practices.

CURR 520 Teaching and Learning Geometric Understanding 3 Credits
This course provides an in-depth study of the content and pedagogy for geometric understanding. It addresses students' mathematical understanding of shapes and their properties, location, transformation of shapes, and visualization; the cognitive development of geometric thinking; and the instructional, curricular, and assessment implications for teaching. Emphasis is placed on the NCTM Principles of problem solving, reasoning and proof, connections, communication, and multiple representations and the Common Core State Standards for Mathematics Practices.

CURR 522 Teaching and Learning Measurement and Data 3 Credits
This course provides an in-depth study of the content and pedagogy for measurement, data analysis, and probability. Mathematical content includes units, systems, and processes of measurement; techniques, tools, and formulas to determine measurements; data collection and display; statistical methods to analyze data; and, evaluating inferences and predictions. Emphasis is placed on children's cognitive development of measurement and data, and the instructional, curricular, and assessment implications for teaching. The course includes the NCTM Principles of problem solving, reasoning and proof, connections, communication, and multiple representations and the Common Core State Standards for Mathematics Practices.

CURR 523 Teaching and Learning Mathematics in the High School 3 Credits
This course addresses issues central to teaching and learning mathematics in the high school; building learning communities, how students learn mathematics, use of worthwhile mathematical tasks, instructional modes, technology options, and assessment to inform instruction. Mathematical topics examined are number and quantity, algebra, trigonometry, geometry, and statistics and probability, and modeling. Strong emphasis is placed on the NCTM Principles of problem solving, reasoning and proof, connections, communication, and multiple representations and on the Common Core State Standards for Mathematics Practices.

CURR 524 Teaching Mathematics in the Middle School 3 Credits
This course has been designed to guide both in-service and pre-service teachers towards growth in teaching mathematics in middle school classrooms, according to the best of current practices. It is accepted that teaching and learning is an ongoing process throughout our careers. Teaching math well requires: a) Deep understanding of the mathematics content, b) Understanding of how students develop mathematical ideas, and c) The ability to shape appropriate learning environments and tasks. Realistically, the process of teaching mathematics, how student learn it, and how to build appropriate learning environments in courses like this one is only the first step towards developing the content and pedagogical skills needed to teach in the 21st century. The objective is to help students construct ideas that take them in the right direction, providing models for the continued long-term learning they will develop with their own classrooms clearly in mind. According to the best of current practice, this involves learning through exploration, inquiry and discovery. As students communicate and then reflect on teaching situations, they will form what has been described as a community of practice, a prototype for how groups of educators join forces, over months and years, to strengthen both their understanding and school practice.

CURR 526 Place Value Instruction: Navigating the Decimal 3 Credits
K-8 teachers examine the theory and practice of K-8 place value instruction during a weeklong course. Incorporating the ideas of the successful CONNECT-ED project, this seminar will examine place value theory and model instructional design that traces children's developmental levels and aligns with national and state standards. Participants will work with peers and experienced University faculty to design longitudinal instructional modules on other math topics. By engaging in this multi-grade design process, teachers will examine new ideas about mathematics, children's mathematical thinking, and mathematics instruction. Participants can earn professional development hours or college credit.
CURR 527 Curricular and Instructional Design for Fraction Understanding 3 Credits
K-8 teachers examine the theory and practice of K-8 fraction instruction during a weeklong course. Based on the successful CONNECT-ED project, this seminar will model how to design fraction instruction that traces children's developmental levels, and aligns with national and state standards. Participants will work with peers and experienced University faculty to design similar instructional activities. By engaging in this multi-grade design process, teachers will examine new ideas about mathematics, children's mathematical thinking, and mathematics instruction. Participants can earn professional development hours or college credit.

CURR 531 Strategies for Curriculum Development, Design, Innovation and Change 3 Credits
This course will address the importance of philosophy, historical precedents, learning theory, developmental theory, emerging social trends and issues, and recent trends in content knowledge as bases for designing and developing the K-12 curriculum. The articulation of curriculum aims and goals, the development and selection of learning experiences, the organization of learning experiences, and plans for evaluating curriculum outcomes are used as steps for developing the curriculum. Students investigate the roles teachers, teacher leaders, supervisors and administrators play in implementing curriculum designs in school settings. Students are expected to demonstrate course understandings through actual school applications and field experiences that are referenced to core curriculum content standards, professional development standards and national school leadership standards.

CURR 532 Strategies for Curriculum Change 3 Credits
This course will examine organizational skills and knowledge necessary to effect curriculum development and change, K-12. The course will address the socio-political context of curriculum change along with alternative strategies for initiating, implementing and sustaining standards-based curriculum improvements. Topics of study include strategic planning, problem-solving strategies, needs assessments, curriculum alignment, program evaluation, staff development and the organization of staff members for collaborative deliberation and decision making as essential means for promoting successful curriculum change at all levels of schooling. Students will demonstrate course understandings through actual classroom and school applications that are referenced to state adopted core curriculum content standards and professional development standards, the Standards for School Leaders of the Interstate School Leaders Licensure Consortium, and the candidate proficiencies developed by the Educational Leadership Constituent Council.

Prerequisite(s): CURR 531.

CURR 533 Elementary School Curriculum 3 Credits
A review of principles, curriculum, and methodology in elementary education, examined in the framework of social, cultural, and psychological developments. Recent developments in theory and empirical knowledge are analyzed. Emphasizes developing the content and organization of an integrated curriculum with a concern for individual differences with provision for social environments best adapted to fulfill basic needs and interests.

Prerequisite(s): CURR 531.

CURR 534 Secondary School Curriculum 3 Credits
A survey of the changing aims and programs of the secondary school. General, specialized, vocational, and activity programs are discussed with an analysis and evaluation of recent curriculum developments and projects. Current issues and controversies, in addition to research findings affecting secondary curriculum, are studied.

Prerequisite(s): CURR 531.

CURR 535 Theory and Practices of Bilingual Education 3 Credits
Introduces the rationale and research as a basis for bilingual education as well as the varied and current approaches to implementing programs. Implications drawn from the social, psychological, and linguistic problems of bilingual learners are considered as they apply to the needs, goals, and issues of bilingual/bicultural programs.

CURR 536 Special Studies in Curriculum, Instruction, and Supervision 3 Credits
The content of this course varies for each offering. In-depth treatment of issues, problems, concerns, or developments in curriculum, instruction and/or supervision will be provided. Topics such as global education, teaching and learning styles, classroom management, etc., are announced in advance and serve as the focus of course content.

CURR 538 Assessment of Curriculum and Instruction to Improve the Performance of Teachers and Diverse Learners 3 Credits
This course establishes the implemented curriculum by establishing the relationship between curriculum goals and the instructional strategies needed to realize those purposes. Emphasis will be placed on analyzing and using various instructional models to meet the learning expectations embodied in curriculum goals and core curriculum content standards from pre-school to high school. Students will examine instructional strategies from the perspectives of assessing research findings on effective practices, realizing curriculum standards, adapting the classroom to diverse learner needs, establishing appropriate staff development agendas, and providing forms of supervisory support to optimize learning and achievement. Students will demonstrate course understandings through actual classroom and school applications that are referenced to state adopted core curriculum content standards and professional development standards, the Standards for School Leaders of the Interstate School Leaders Licensure Consortium, and the candidate proficiencies developed by the Educational Leadership Constituent Council.

Prerequisite(s): CURR 531.
CURR 548 Curriculum and Instruction for Diverse Learners 3 Credits
This course will examine the curricular and instructional issues that educational leaders must address in accommodating the school program to the needs and abilities of diverse learners. A historical perspective will be developed with an emphasis on how schools have responded to meet the needs of the exceptional child. Legal issues and programmatic trends will be examined and assessed since the inception of the Individuals with Disabilities Education Act. Multicultural issues will be introduced within the context of school and society. The responsibility of the educational leader in fostering a multicultural perspective pertaining to curriculum and instruction, governance, bias and prejudice and school climate and culture will be emphasized. Students will identify and develop curricular possibilities and solutions in school settings to accommodate learners' diverse needs. Students will demonstrate course understandings through actual classroom and school applications that are referenced to state adopted core curriculum content standards and professional development standards, the Standards for School Leaders of the Interstate School Leaders Licensure Consortium, and the candidate proficiencies developed by the Educational Leadership Constituent Council.

Prerequisite(s): CURR 531 and CURR 538.

CURR 552 Creative, Ethical Teacher Leadership 3 Credits
In order to be effective, teacher leaders require in-depth understanding of the complex, threat-filled, 21st-century globalized environment that provides the context for their work. They must understand the problems, opportunities, and pressures generated by the current socioeconomic, political, and cultural system of the United States, which is characterized by dogmatism-saturated disputes over the purposes of education and the allocation of resources. In addition, they must appreciate the ways in which the larger forces of globalization influence these national trends and issues. Finally, they must understand the ways in which the principles of wise, ethical, intelligent, and creative leadership can help them and their colleagues in their efforts to maintain and strengthen student learning in these daunting conditions.

CURR 580 Action Research Tchg & Learn 3 Credits
CURR 585 Practicum Conductng Action Rsch 3 Credits
CURR 590 Seminar and Practicum in Curriculum, Instruction and Supervision 3 Credits
Taken at the completion of all course work in the program. Students study in seminar fashion the current literature and research in the general areas of curriculum, instruction and supervision. Each student is involved in an individualized field experience. Typically the experience involves work with supervisory assistance in a selected segment of the student’s school district, or in an approved location. The cooperation of the administrative staff of the student’s school district is essential for the effective completion of this project. The instructor is free to observe the project in progress, and to evaluate the completed research project and the finished project paper.

Prerequisite(s): all course work including EDUC 500, permission of instructor.

CURR 600 Independent Study and Research 1-3 Credits
Course content varies with academic research interests of students who wish to engage in independent study related to the overall content of curriculum, instruction and/or supervision.
CURR 650 Understanding Gifted Learners 3 Credits
The course explores the ways in which the gifted and talented can differ from more typical learners in terms of their cognition, social-emotional dimensions, behavior, and long-term development. It focuses on theories of intelligence, differing conceptions of giftedness and talent development, and learning processes. Some specific topics include underachievement, perfectionism, dual exceptionality, gender issues, and underserved populations. The course also addresses the ways in which gifted education can evolve to fit the demands and opportunities embedded in complex, 21st-century socioeconomic, cultural, and technological contexts.

CURR 652 Differentiating Instruction for the Gifted and Talented 3 Credits
This course provides the rationale and practical strategies for effective instructional differentiation for the gifted and talented within and beyond the regular classroom. Participants will learn how to differentiate within subject areas by adjusting content, process, product, and learning environment to meet the needs of learners. They will also explore the nature and nuances of differentiation by ability, readiness, and interest, as well as the implications of instructional differentiation for formative and summative assessment. Throughout the course they will design and share examples of differentiation including tiered assignments, complex instruction, independent studies, graphic organizers, and learning contracts.

CURR 654 Innovative Instructional Strategies for Gifted Education 3 Credits
This hands-on, experiential course immerses participants in simulations and analyses of new and revised student-centered teaching models and strategies that are conducive to creative and critical thinking, advanced content mastery, and the invigoration of students’ interests. Participants analyze the potential of each model/strategy while considering the ways in which it can apply to content learning in various subject areas/domains. The course also engages participants in studying the fundamental principles of program design in gifted education so they can make the best possible use of the instructional models and strategies.

CURR 656 Creative, Interdisciplinary Thinking 3 Credits
This course facilitates creative thinking through the exploration of important specific natures of giftedness and creativity.

CURR 700 Educational Foundations for Inclusive Practices 3 Credits
This course provides psychological and interdisciplinary perspectives on teaching and learning. Within the theme of optimal development of creative intelligence, and in concordance with important NJ and national professional standards, candidates will use these perspectives to begin their career-long processes of reflective professional development. More specifically, the course develops knowledge, skills, and dispositions pertinent to (a) child and adolescent development, (b) learning theories, (c) learner diversity, (d) classroom management, (e) career readiness skills, (f) philosophical and historical perspectives on education, (g) sociocontextual and interdisciplinary influences on education, and (h) higher-order, creative and critical thinking. The emphases on student development and learner diversity entail in-depth investigation of the following subtopics: the philosophical, legal, and historical foundations of special education; the characteristics of students with disabilities and learning strengths; inclusive practices; professional partnerships for support of diverse learners; and strategies for modification of curriculum content and materials aligned to NJ Student Learning Standards, learning environments and processes, and learning products for students with disabilities and strengths.

CURR 702 Early Literacy Development for Diverse Learners 3 Credits
This course addresses current strategies for teaching beginning learners’ vocabulary, comprehension, composition, and language study. It addresses strategies for the development of literacy for all learners ranging from the gifted and talented to those with learning disabilities or other special needs. The course develops proficiency with the management of literacy instruction for content areas in general education in preschool and primary grades and planning aligns with NJ Student Learning Standards. It provides candidates with the pedagogical literacy proficiency necessary for the development of their students’ career readiness skills (employability skills, employment readiness through enhanced literacy capacities). Field experiences include observation and interaction in classes focusing on literacy instruction in inclusive classrooms.

CURR 703 Inclusive Literacy Practices Across Content Areas 3 Credits
This course addresses varied literacy strategies for teaching diverse adolescents across content areas in secondary schools. Professional educators use a variety of instructional methods, curriculum unit/lesson planning, and assessment strategies to help diverse students actively construct their own learning as well as critically access and assess new information. Through in-class workshops and discussions, reading, group and individual work, the course uses various methods, models, and strategies for integrating literacy for diverse adolescent learners across settings and subject matters aligned with NJ Student Learning Standards. The course also provides candidates with the pedagogical literacy proficiency necessary for the development of their students’ career readiness skills (employability skills, employment readiness through enhanced literacy capacities). Field experiences include observation and interaction in classes focusing on various literacy strategies in inclusive classrooms.

CURR 704 Inclusive Methods for Teaching English Language and Theater Arts 3 Credits
This course provides experience with various methods of teaching and learning integrated English language and theater arts and with diverse adolescent students. Teacher candidates explore methods, classroom management, and strategies for teaching and learning through reading/literature, language development, writing/composing processes, representing and performing, speaking, listening, and viewing/creating media. Candidates design curriculum and assessments using NJ Student Learning Standards for Language Arts Literacy and Theatre and Visual Arts curriculum standards. Aligned with NCTE’s Guidelines for the Preparation of Teachers of English Language Arts, the course uses collegial collaboration during the review of student work, co-planning curriculum and assessment in the development of employability skills such as collaborative planning, teaching, and assessment review. A field-based middle school partnership embedded in the course allows candidates to work with a range of diverse students and explore implications for teaching, learning, and providing access to the general curriculum for all students.

CURR 705 Inclusive Methods for Teaching Social Studies 3 Credits
This course addresses the practical and theoretical aspects of teaching social studies to diverse adolescents in secondary schools. Using the NJ Student Learning Standards in Social Studies, candidates will prepare and design curriculum and assessment for students in various learning environments and with diverse learning needs. The course also examines the characteristics of secondary students with disabilities as well as strategies for modifying social studies curriculum planning, learning environments, and instructional materials to address diverse learning needs. The clinical, field-based component of the course requires candidates provide instructional support for diverse learners.
CURR 706 Inclusive Methods for Teaching Science 3 Credits
Classroom interaction analysis systems are used in the study of the instructional processes that support inquiry-based science learning. Candidates develop their own repertoires of teaching strategies, classroom management strategies, and awareness of career requirements in STEM fields. Emphases are on the investigation and interpretation of recent curriculum developments in NGSS and NJ Student Learning Standards in Science as well as the use of lab-based processes in science learning. The course also examines the characteristics of secondary students with disabilities as well as strategies for modifying science curriculum planning, learning environments, and instructional materials to address diverse learning needs. The clinical, field-based component of the course requires candidates provide instructional support for diverse learners.

CURR 707 Inclusive Methods for Teaching Mathematics 3 Credits
This course critically analyzes the aims of teaching mathematics in secondary schools. Research pertaining to mathematics teaching and learning is analyzed. Demonstration lessons including reflective teaching and individual and group processing are created and carried out to clarify teaching, mathematics curriculum planning using NJ Student Learning Standards in Mathematics, the organization of materials and subject matter, assessment processes classroom management strategies, and awareness of career requirements in STEM fields. The course also examines the characteristics of secondary students with disabilities as well as strategies for modifying mathematics curriculum planning, learning environments, and instructional materials to address diverse learning needs. The clinical, field-based component of the course requires candidates provide instructional support for diverse learners.

CURR 710 Math Methods for the Inclusive Elementary Classroom 3 Credits
This course introduces candidates to effective mathematics instruction based on learning trajectories of diverse learners in preschool and elementary classrooms. In alignment with NAECY and NCTM and NJ Student Learning standards, emphasis is placed on planning and implementing an inquiry-based approach with hands-on experiences, use of technology, and traditional and non-traditional assessment strategies. Students also explore positive models of classroom management and environment design to support diverse learning needs. The course provides candidates with the pedagogical proficiency necessary for the development of the mathematical dimensions of their students’ career readiness skills. Field experiences consist of classroom observations with instructional analysis and assessment of children's mathematical thinking.

CURR 711 Pedagogy and Methodology in Dance 3 Credits
This course provides the student with first-hand experience inside a classroom setting to broaden the students' understanding of dance techniques, teaching styles and strategies, analysis of skills and critical feedback, class preparation and design, and assessment. Course requirements include off-campus field work. Crosslisting the existing methods course in Dance for beginning teachers offered at the undergraduate level (DAN 450).

CURR 715 Inclusive Elementary Science, Arts, & Social Studies Teaching 3 Credits
This course provides aspiring elementary school teachers with a variety of developmentally appropriate options for designing, implementing, and evaluating curriculum and instruction in science, social studies, and the arts. Using NJ Student Learning Standards, emphasis is placed on inclusive practices and differentiation of instruction (e.g., modifying curriculum planning, learning environments, and instructional materials, content, processes, and products), curriculum integration, thematic unit and lesson planning, various teaching strategies, hands-on learning experiences, inquiry learning, career readiness skills, higher-order thinking, reflective practice, and various assessment strategies. Other facets of teaching also are assessed or reviewed in the course. These include the characteristics and needs of students with disabilities motivation, classroom management, and becoming a team member of a school faculty. Candidates also refine their pedagogical knowledge and skills by participating in the modification of instruction to meet the needs of diverse learners in nearby school settings.

CURR 720 Inclusive Curriculum Design & Instruction in Secondary Schools 3 Credits
This course offers an overview of curriculum designs and their relation to teaching, learning, assessment, and providing curriculum access for all students in middle and high schools—secondary classrooms. The course assumes that professional educators use a variety of instructional methods, curriculum unit/lesson planning and assessment strategies to help a variety of diverse adolescent students actively construct their own learning and enjoy access to the general curriculum. Using NJ Student Learning Standards, candidates acquire skills in instructional planning, classroom management, and the development of career readiness skills along with required field-based observations and experiences. 

Prerequisite(s): CURR 703.

CURR 770 Clinical Experience and Seminar in Teaching 9 Credits
This course, designed for those seeking initial certification, requires full-time supervised daily participation in a school setting with diverse students including students with disabilities. The candidate gradually assumes a full load of teaching responsibility. These experiences test and strengthen the translation of educational theory and research into meaningful practice. An on-campus or site-based seminar accompanies the clinical experience. Seminars emphasize reflective development toward professionalism through sharing and analyses of experiences, and in-depth reports on teaching learners with disabilities and instructional modifications employed to meet their needs. Additional analyses of student learning and reflective assignments require candidates to connect their clinical experiences with content knowledge and pedagogical knowledge from prior course work. The clinical experience is augmented with a series of additional seminars, which include the following: introductory/orientation seminars prior to the beginning of the semester; strategies for designing inclusive education practices and positive behavioral supports, assistive technology for diverse learners, transition planning, and agencies available for students with disabilities; classroom management strategies; awareness of methods for strengthening student achievement and career readiness, panel sessions with veteran teachers who graduated from this program; panel sessions with principals and superintendents who provide advice about long-term professional development; interviews with special education teachers who provide advice about meeting the needs of students with disabilities; and wrap-up reflective sessions at the conclusion of the semester.

Prerequisite(s): CURR 704, CURR 705, CURR 706, CURR 707, CURR 715 and (BSED 530 or ECED 550) or Permission of instructor.
CURR 771 Supervised Clinical Experience in Teaching 3 Credits
This practicum is a condensed version of the Internship in Teaching. It is available only to interns seeking teacher certification who already have a year of successful, full-time teaching experience or its equivalent. A special application must be made and approved for enrollment in the course. The practicum requires six weeks of full-time, supervised daily participation in a school setting. After a brief period of orientation to the school and classroom, the intern assumes a full load of teaching responsibility at the school. The experience finetunes the teaching abilities of interns and enables them to demonstrate competence in the specialty for which they seek certification.
Prerequisite(s): CURR 704, CURR 705, CURR 706, CURR 707, CURR 715 and (BSED 530 or ECED 550) or Permission of instructor.