EDUCATION (ED)

ED 199. SPECIAL TOPICS. (1-16 Credits)
Students in this course receive training and experience in one-on-one and group tutoring in varied courses. They are then assigned tutees.
Equivalent to: TCE 199
This course is repeatable for 16 credits.

ED 216. *PURPOSE, STRUCTURE, AND FUNCTION OF EDUCATION IN A DEMOCRACY. (3 Credits)
Introduction to the historical, social, philosophical, political, legal and economic foundations of education in Oregon, the United States, and other countries in order to provide a framework from which to analyze contemporary educational and environmental issues in various schools, communities, and workplaces. (Bacc Core Course)
Attributes: CPDP – Core, Perspective, Difference/Power/Discrimination
Equivalent to: ED 216H, TCE 216

ED 216H. *PURPOSE, STRUCTURE, AND FUNCTION OF EDUCATION IN A DEMOCRACY. (3 Credits)
Introduction to the historical, social, philosophical, political, legal and economic foundations of education in Oregon, the United States, and other countries in order to provide a framework from which to analyze contemporary educational and environmental issues in various schools, communities, and workplaces. (Bacc Core Course)
Attributes: CPDP – Core, Perspective, Difference/Power/Discrimination; HNRS – Honors Course Designator
Equivalent to: ED 216

ED 219. CIVIL RIGHTS AND MULTICULTURAL ISSUES IN EDUCATION. (3 Credits)
Examination of the context of working with students, schools, communities, and workplaces; the diversity of learning cultures (e.g., urban, suburban, rural) and the diversity among learners within those different cultures; and the influence of culture on one’s learning.
Equivalent to: TCE 219

ED 253. LEARNING ACROSS THE LIFESPAN. (3 Credits)
An exploration of how learning occurs at all ages from early childhood through adulthood. Covers major and emerging theories and styles, self-reflection on implications of how learning occurs for self and others, and the impact of these issues on the development and delivery of instruction.
Equivalent to: TCE 253

ED 299. SPECIAL TOPICS. (1-16 Credits)
Equivalent to: TCE 299
This course is repeatable for 16 credits.

ED 309. FIELD PRACTICUM. (3-6 Credits)
Placement in either an elementary, middle or secondary school. To assist students to develop competencies in dealing with children or adolescents according to the individual major of the university student.
Equivalent to: TCE 309
This course is repeatable for 18 credits.

ED 340. *SUPPORTIVE DIFFERENTIATED ENVIRONMENTS. (3 Credits)
Addresses special abilities and needs of learners and helps prepare teachers to develop strategies and instructional practices for diverse learners and students with exceptionalities in a supportive and inclusive classroom. (Writing Intensive Course)
Attributes: CWIC – Core, Skills, WIC
Equivalent to: TCE 340

ED 394. DIFFERENTIATION IN THE ELEMENTARY CLASSROOM. (2 Credits)
The role of culture, language, and group identification in learning will be examined and applied to the consideration of differentiated instructional strategies in grades K-5. Students will learn strategies teachers use to help differentiate instruction to meet the diverse needs of students in the elementary classroom.

ED 399. SPECIAL TOPICS. (1-16 Credits)
Equivalent to: TCE 399
This course is repeatable for 16 credits.

ED 401. RESEARCH. (1-16 Credits)
Equivalent to: TCE 401
This course is repeatable for 16 credits.

ED 402. INDEPENDENT STUDY. (1-16 Credits)
Equivalent to: TCE 402
This course is repeatable for 16 credits.

ED 403. THESIS. (1-16 Credits)
This course is repeatable for 16 credits.

ED 405. READING AND CONFERENCE. (1-16 Credits)
Equivalent to: TCE 405
This course is repeatable for 16 credits.

ED 406. PROJECTS. (1-3 Credits)
Equivalent to: TCE 406
This course is repeatable for 16 credits.

ED 407. SEMINAR. (1-16 Credits)
Equivalent to: ED 407H, TCE 407
This course is repeatable for 16 credits.

ED 407H. SEMINAR. (1-16 Credits)
Attributes: HNRS – Honors Course Designator
Equivalent to: ED 407, TCE 407
This course is repeatable for 16 credits.

ED 408. WORKSHOP. (1-3 Credits)
Equivalent to: ED 408H, TCE 408
This course is repeatable for 16 credits.

ED 408H. WORKSHOP. (1-3 Credits)
Attributes: HNRS – Honors Course Designator
Equivalent to: ED 408, TCE 408H
This course is repeatable for 16 credits.

ED 409. PRACTICUM/CLINICAL EXPERIENCE. (1-16 Credits)
Equivalent to: TCE 409
This course is repeatable for 16 credits.

ED 410. INTERNSHIP/WORK EXPERIENCE. (1-18 Credits)
Equivalent to: TCE 410
This course is repeatable for 18 credits.

ED 411. EDUCATIONAL PSYCHOLOGY, LEARNING AND DEVELOPMENT. (3 Credits)
An opportunity to begin the transition from student to teacher. Explores the relationship between human development and learning through the life cycle.
Equivalent to: TCE 411
ED 412. LEARNING STYLES AND NEEDS IN ADOLESCENCE. (2 Credits)
Exploration of the particular learning styles and needs of the adolescent, major and emerging learning theories, individual learning styles including one’s own learning styles, self-reflection on implications of how learning occurs, and the impact of these issues on the development and delivery of instruction.
Equivalent to: TCE 412

ED 413. LEARNING ENVIRONMENTS I: FOSTERING CLASS ENGAGEMENT. (3 Credits)
Creating a positive culture in the classroom, managing student behavior, and engaging students in critical learning discourse are challenges faced by all educators. Students will learn to develop the components of a productive and safe learning environment.

ED 414. LEARNING ENVIRONMENTS II: ADVANCING EVERY STUDENT. (2 Credits)
Students will expand their knowledge about constructing a positive K-12 classroom environment to a productive learning environment accommodated to fit the needs of a diversified student population.
Prerequisites: ED 413 with D- or better

ED 420. CLASSROOM MANAGEMENT. (3 Credits)
Build knowledge and learn techniques for cultivating a positive learning environment and for managing classrooms. Learn through examining the literature and observing relevant learning environments and classrooms. Explore factors that influence student behavior, including those associated with social and/or multicultural student populations.

ED 424. TEACHER AS REFLECTIVE PRACTITIONER. (2 Credits)
Designed to help teachers make complex judgments based upon their knowledge and understanding of their students, the curriculum, and larger social and cultural issues through reflective practice. Problem solving related to teaching with strong focus on generating new knowledge about teaching, learning, and assessment.
Prerequisites: ED 407 with C- or better and ED 410 [C-]

ED 425. CURRICULUM IMPLEMENTATION AND INSTRUCTIONAL STRATEGIES 7-12. (4 Credits)
The relationship of theory to practice in teaching the content areas in grades 7-12 is examined. General curriculum trends as well as content selection in specific endorsement/subject areas are explored. This course is preparation for and is coordinated with part-time student teaching.
Equivalent to: TCE 425

ED 427. ASSESSMENT FOR K-12 INSTRUCTION. (2 Credits)
Students study and practice the administration, interpretation, and design of assessments for groups and individuals within the content area. Students will develop an understanding of a variety of assessment strategies for K-12 education that will enhance their understandings of the role of assessment in learning and curriculum design.
Equivalent to: TCE 427

ED 429. CURRICULUM, INSTRUCTION, AND ASSESSMENT FOR CTE. (3 Credits)
Build knowledge and skills in curriculum design, instructional strategies, and assessment for successful teaching in a Career and Technical Education and other specialty areas: (a) Agriculture Food and Natural Resource Systems, (b) Arts, Information and Communications, (c) Business Management, (d) Health Sciences (e) Human Resources, (f) Industrial and Engineering Systems, (g) Family and Consumer Sciences, (h) Career Trades.

ED 440. HUMAN DEVELOPMENT AND PSYCHOLOGY OF THE ADOLESCENT. (3 Credits)
Examines research from psychology, human development, and neuroscience to provide a holistic understanding of adolescents and learning with a focus on the middle/secondary student. Investigates the influence of family, neighborhood, peer, and school contexts on brain development; identity formation; and the challenges and opportunities of adolescence.

ED 450. FOUNDATIONS OF EDUCATION AND PLANNING. (4 Credits)
The first of three courses examining the iterative cycle of curriculum planning, instruction and assessment. An introduction to learning theory and the relationship between teaching and learning provide the foundation. An overview of the complete teaching cycle leads to a focus on curriculum planning based on state standards.

ED 451. ASSESSMENT. (4 Credits)
Assessment for and of learning and its importance to student engagement and advancement. Formal and informal writing derived from multiple revisions will result in documents intended for different audiences including parents, school administrators, and national assessment prompts citing research-based practices.
Attributes: CWIC – Core, Skills, WIC
Prerequisites: ED 450 with C or better

ED 452. USING DATA TO SUPPORT ALL STUDENTS. (3 Credits)
Teacher candidates will gather and analyze student data to inform instructional practice devoted to enhancing student learning; develop data literacy skills; differentiate instruction for targeted groups and individualized student learners while continuing to foster higher-order thinking and communication skills in the whole class: analyze patterns and gaps in individualized student learning; apply differentiated instruction and assessment strategies to support student growth; engage learners in goal setting; and identify teaching and assessment strategies to work with students with exceptional needs.
Prerequisites: ED 451 with C or better

ED 456. STRATEGIES FOR TEACHING LANGUAGE ARTS AND SOCIAL STUDIES. (3 Credits)
Exploration of language arts and social studies programs (e.g., children's literature, writing, special needs, spelling, and cultural factors). Development of research-based teaching strategies and assessment. Focuses on the development of inquiry approaches that reflect interdisciplinary curriculum as well as subject-specific pedagogy in the teaching of both social studies and language arts.
Equivalent to: TCE 456
Recommended: ED 216 and ED 219 and ED 253

ED 457. TEACHING ELEMENTARY MATHEMATICS FOR UNDERSTANDING. (3 Credits)
Part of the Education Double Degree. Explores the teaching of mathematics in K-8 classrooms in a manner consistent with state and national standards. Students learn teaching strategies that incorporate the development of mathematical models and mental constructs.
Equivalent to: TCE 457
Recommended: MTH 211 and MTH 212 and MTH 390
ED 458. STRATEGIES FOR TEACHING WELLNESS AND FINE ARTS. (2 Credits)
Exploration of recent trends and research-based practices in the teaching of wellness, physical education, and fine arts. Includes strategies, assessments, special needs, integrating curriculum through developmentally appropriate practices, content standards, and the value of developing holistic learners though an effective wellness and fine arts program.
Equivalent to: TCE 458
Recommended: ED 216 and ED 219 and ED 253

ED 463. STRATEGIES FOR TEACHING PHYSICAL EDUCATION HEALTH & WELLNESS. (1 Credit)
Exploration of recent trends and research-based practices in the teaching of physical education, health, and wellness in elementary school.
Includes instructional strategies for developing holistic learners though an effective wellness program.

ED 465. ELEMENTARY METHODS: LITERACY. (2-4 Credits)
Understanding the theoretical and developmental foundations for literacy programs K-5; targeted reading, writing, listening, vocabulary, and speaking skill needs assessments; organizational strategies for teaching literacy; understanding dyslexia and how to differentiate instruction for students with dyslexia; and the integration of cultural diversity and social justice into literacy learning.
This course is repeatable for 4 credits.

ED 466. ELEMENTARY METHODS II: MATHEMATICS. (4 Credits)
Exploration of the teaching of early childhood/elementary school mathematics with emphases on problem solving, connections, representation, communication, reasoning and proof. Course will incorporate the development of mathematical models and mental constructs. Research-based, developmentally appropriate and culturally relevant practices will be incorporated into lessons.

ED 467. ELEMENTARY METHODS III: NATURAL AND SOCIAL SCIENCE. (4 Credits)
Inquiry approaches to the teaching and learning of the natural and social sciences are used to explore the structure of the disciplines and support the creation of instructional units that develop disciplinary knowledge and practices/skills while highlighting cross-cutting themes. Scientific literacy and civic competence are emphasized.

ED 468. ELEMENTARY METHODS IV: LANGUAGE ARTS. (4 Credits)
This course will build on ED 465: Elementary Methods I: Literacy. Development of pedagogy in teaching of reading to elementary-aged students, including the teaching of vocabulary, comprehension, phonics, fluency and motivation to read. Use of children's literature, assessment approaches, and special needs students are also addressed. Students will gain a deeper level of understanding in how to differentiate the teaching of reading at grades K-5, how to run a Writers' Workshop, and how to integrate literacy into other content areas.
Prerequisites: ED 465 with C or better

ED 469. STRATEGIES FOR TEACHING THE FINE ARTS. (1 Credit)
Exploration of recent trends and research-based practices in the teaching of performing arts (dance, music, theater) and the visual arts in elementary school.
Includes instructional strategies for developing holistic learners though an effective fine arts program.

ED 470. BILITERACY INSTRUCTION. (3 Credits)
Explores literacy development in Spanish and English. Examines differences in literacy development across the two languages, as well as pedagogical approaches that leverage students’ home language and literacy practices. Explores equity and bias in classroom language practices. Taught bilingually in Spanish and English.
Prerequisites: ED 472 (may be taken concurrently) with C or better

ED 471. MULTILINGUAL LINGUISTICS. (3 Credits)
Explores linguistic categories: phonology, morphology, syntax, semantics, pragmatics, and discourse. Focuses on academic language development and teaching implications for emergent bilingual students in Spanish-English K-12 dual language programs. Taught bilingually in Spanish and English.
Prerequisites: ED 472 (may be taken concurrently) with C or better

ED 472. FOUNDATIONS OF ESOL EDUCATION. (3 Credits)
Examines characteristics of English language learners (ELLs), key theories in language acquisition, the role of culture in language development, and instructional program models for ELLs, while considering implications for classroom instruction.
Equivalent to: TCE 472

ED 473. INSTRUCTIONAL APPROACHES FOR ESOL EDUCATION. (3 Credits)
Examines characteristics of standards-based content-area instruction for emergent bilinguals. Includes integration of content and language development, classroom-based assessment, and use of technology to support student learning.
Prerequisites: ED 472 with C or better
Equivalent to: TCE 473

ED 474. PROJECT-BASED MATHEMATICS. (3 Credits)
Building on the foundational concepts covered in ED 457 and ED 466/ED 566, students will plan and apply project-based lessons. Students will transfer knowledge and skills of mathematics to real world problems and will learn to teach with a project-based approach.

ED 475. INTEGRATED STEM. (3 Credits)
Students will continue to develop their pedagogical content knowledge in science, technology, engineering, mathematics, and integrated STEM.
Students will develop a deeper understanding of the crosscutting concepts common to all science endeavors and will learn how to use these concepts to bridge across science or STEM curriculum units. Students will also examine and develop expertise in using science and engineering practices to lead students in authentic inquiry. Integrating crosscutting concepts, science and engineering practices, and disciplinary core ideas, students will learn and practice the development of curriculum and instruction utilizing the engineering design process.

ED 476. PARTNERSHIPS AND IDEOLOGIES IN ESOL EDUCATION. (3 Credits)
Considers social and political issues pertaining to educating English language learners. Focuses on exploring multiple ideologies in ESOL and building partnerships across schools, families, and communities.
Prerequisites: ED 472 with C or better
Equivalent to: TCE 476

ED 477. DIFFERENTIATION FOR STUDENTS WITH SPECIAL NEEDS. (3 Credits)
Building on the foundational concepts covered in HDFS 431, this course goes into greater depth on how to provide students with a range of exceptionalities with education in the least restrictive environment.
Teacher candidates will explore differentiated instruction techniques for students with special needs that can be used in both the regular education and pull out Special Education resource classrooms.
ED 478. SPECIAL EDUCATION LAW RIGHTS AND REGULATIONS. (3 Credits)
In-depth review of special education law and regulations that protect and provide educational rights for students with disabilities. Teacher candidates will leave the class understanding both the historical and current legal rights of students receiving special education and how to best meet those rights in both the regular and special education resource classrooms.

ED 479. LINGUISTICS FOR TEACHERS. (3 Credits)
Explores linguistic categories: phonology, morphology, syntax, semantics, pragmatics, and discourse. Focuses on teaching implications—from psycholinguistic, sociolinguistic, and critical perspectives—for emergent bilingual students in P-12 contexts.
Prerequisites: ED 472 with C or better
Equivalent to: TCE 479

ED 480. TEACHING MATH TO SECONDARY LEARNERS IN CONTEXT. (3 Credits)
Enhance and reinforce mathematics embedded within occupational-specific curricula taught at the secondary level to prepare Career and Technical Education teachers for licensure.

ED 481. READING AND WRITING FOR SECONDARY LEARNERS IN CONTEXT. (3 Credits)
Enhance and reinforce the authentic reading and writing embedded within occupationally relevant materials to prepare Career and Technical Education teachers for licensure.

ED 483. DEVELOPMENTAL READING. (3 Credits)
Development of pedagogy in teaching of reading to elementary-aged students, including teaching of vocabulary, comprehension, phonics, fluency and motivation to read. Use of children's literature, assessment approaches, and special needs students are also addressed. This is a PTCE course in the elementary Double Degree Program.
Equivalent to: TCE 483

ED 484. INTRODUCTION TO CAREER AND TECHNICAL EDUCATION. (3 Credits)
A study of the history of Career and Technical Education, the impact of the educational reform on Career and Technical Education and workforce development. Topics include leaders in vocational education; legislative initiatives, social issues, and organizations involved in and impacting Career and Technical Education.

ED 492. TECHNOLOGY TOOLS FOR TEACHING. (2 Credits)
Teacher candidates will learn the technology skills needed to be successful as a classroom teacher. Topics range from exploration of how digital tools can be used in instruction, assessment, communication, and collaboration in educational settings to bring vibrant energy into student learning and engagement. The course also covers responsible digital citizenship, responsible use and ethics of technology in the classroom.

ED 493. READING, LITERATURE, AND LANGUAGE DEVELOPMENT IN THE CONTENT. (2 Credits)
Examination of reading, literature, and language development methods that can be used by middle school and high school teachers to support students' learning of content area information. Development of specific reading strategies in content areas.
Equivalent to: TCE 493

ED 494. CONTENT STANDARDS AND CURRICULUM DEVELOPMENT FOR HIGH SCHOOL. (3 Credits)
Exploration of content standards, materials and methods appropriate for high school students. Develops skills in work sample methodology through the design of effective instruction, integrating a variety of methods with existing understandings of content area, how people learn, and the diverse communities in which they work.
Equivalent to: TCE 494

ED 496. TECHNOLOGY FOR EDUCATORS. (3 Credits)
Explore the integration of current and emerging technologies into K-12 content areas by engaging learners in real world issues and learning in a social context. Integrate technologies that promote critical thinking, communication, collaboration, and creativity. Discuss technologies in terms of cultural linguistic diversity. Gain transferable skills. Taught via Ecampus only.
Recommended: Basic computer literacy.

ED 499. SPECIAL TOPICS. (1-16 Credits)
Equivalent to: TCE 499
This course is repeatable for 16 credits.

ED 501. RESEARCH. (1-16 Credits)
Equivalent to: TCE 501
This course is repeatable for 16 credits.

ED 502. INDEPENDENT STUDY. (1-16 Credits)
Equivalent to: TCE 502
This course is repeatable for 16 credits.

ED 503. THESIS. (1-16 Credits)
Equivalent to: TCE 503
This course is repeatable for 999 credits.

ED 505. READING & CONFERENCE. (1-16 Credits)
Equivalent to: TCE 505
This course is repeatable for 16 credits.

ED 506. PROJECTS. (1-3 Credits)
Equivalent to: TCE 506
This course is repeatable for 16 credits.

ED 507. SEMINAR. (1-16 Credits)
Equivalent to: TCE 507
This course is repeatable for 16 credits.

ED 508. WORKSHOP. (1-16 Credits)
Equivalent to: TCE 508
This course is repeatable for 16 credits.

ED 509. PRACTICUM. (1-16 Credits)
Equivalent to: TCE 509
This course is repeatable for 16 credits.

ED 510. INTERNSHIP. (1-18 Credits)
By special permission and arrangement.
Equivalent to: TCE 510
This course is repeatable for 40 credits.

ED 513. LEARNING ENVIRONMENTS I: FOSTERING CLASS ENGAGEMENT. (3 Credits)
Creating a positive culture in the classroom, managing student behavior, and engaging students in critical learning discourse are challenges faced by all educators. Students will learn to develop the components of a productive and safe learning environment.
ED 514. LEARNING ENVIRONMENTS II: ADVANCING EVERY STUDENT. (2 Credits)
Students will expand their knowledge about constructing a positive K-12 classroom environment to a productive learning environment accommodated to fit the needs of a diversified student population.
Prerequisites: ED 513 with B or better

ED 515. LEARNING ENVIRONMENTS III: CULTURES AND COMMUNITIES. (2 Credits)
The third in a series of courses to assist the Teacher Candidate in developing a classroom culture of learning that challenges every student to succeed and thrive. Teacher candidates will understand the important role that culture and community play in the teaching and learning process, and develop culturally responsive teaching practices.
Prerequisites: ED 513 with B or better and ED 514 [B]

ED 517. ACADEMIC WRITING FOR MASTER'S STUDENTS. (1 Credit)
A writing refresher that addresses academic voice, style, tone, construction, conventions, and writing style appropriate for master's-level research papers and capstones.
Equivalent to: TCE 517
This course is repeatable for 2 credits.

ED 518. PROFESSIONAL PRACTICE IN THE TEACHING COMMUNITY. (2 Credits)
The professional themes of communication, collaboration, reflection, knowledge of learners, professional ethics, social justice and cultural understanding will be explored and applied to teaching contexts, behaviors, dispositions, and actions.

ED 519. CAPSTONE: TEACHING AS A PROFESSION. (3 Credits)
Capstone course for the MAT in which teacher candidates further develop their educational philosophy and analyze their professional growth in alignment with national standards.

ED 520. CLASSROOM MANAGEMENT. (3 Credits)
Build knowledge and learn techniques for cultivating a positive learning environment and for managing classrooms. Learn through examining the literature and observing relevant learning environments and classrooms. Explore factors that influence student behavior, including those associated with social and/or multicultural student populations.
Equivalent to: TCE 520

ED 521. FUNDS OF KNOWLEDGE IN EDUCATION. (3 Credits)
An introduction to multicultural education and developing cultural competence by using a funds of knowledge approach. This approach helps educators combine fieldwork and ethnographic research methods to gain cultural competence about the students they serve. Educators explore their own funds of knowledge as well as the children's through exploring their community and developing activities centered on children's own connections and resources.

ED 522. RACIAL AND CULTURAL HARMONY IN THE K-12 CLASSROOM. (3 Credits)
An overview of many issues relevant to the increasingly diverse student population in public schools today. It explores how a culturally competent perspective can be incorporated into curriculum design, teaching strategies, and interactions with students and parents. The course is both self-directed and communal, requiring students to respond to the materials and each other, yet at their own pace.
Equivalent to: TCE 522

ED 524. TEACHER AS REFLECTIVE PRACTITIONER. (2-3 Credits)
Designed to help teachers make complex judgments based upon their knowledge and understanding of their students, the curriculum, and larger social and cultural issues through reflective practice. Problem solving related to teaching with strong focus on generating new knowledge about teaching, learning, and assessment.
Equivalent to: TCE 524

ED 528. ASSESSMENT FOR LEARNING. (3 Credits)
Applies the formative learning cycle to through development of an assessment plan. Examines various formative assessment practices that promote higher order thinking and empower students to show evidence of their learning through self-assessment and feedback.
Equivalent to: TCE 528

ED 531. SCIENCE METHODS I: INQUIRY AND THE NATURE OF SCIENCE. (4 Credits)
Introduction to (1) fundamentals of science teaching including the nature of science and inquiry, (2) designing instructional sequences and selecting curriculum resources aligned to state science standards and research-based learning progressions, (3) effective teaching moves, (4) supporting acquisition of academic language, and (5) productive and safe science learning environments.
Equivalent to: SED 513

ED 532. SCIENCE METHODS II: SUPPORTING STUDENTS' CONCEPTUAL CHANGE. (4 Credits)
Development of skill in identifying and addressing misconceptions or naive conceptions as part of the individualized conceptual change process. Integration of technology tools for instruction and assessment. Development of high-leverage science teaching practices with a focus on enhancing classroom discourse and evidence-based argumentation with a survey of science curriculum models.
Prerequisites: ED 531 with B or better

ED 533. SCIENCE METHODS III: SCIENCE FOR ALL LEARNERS. (4 Credits)
Teaching science as a community of practice means addressing the needs of all learners, particularly those underrepresented in science. Uses technology to enhance high-leverage teaching practices and practices safe and effective laboratory teaching methods. Explores contextualized and interdisciplinary approaches to science education.
Prerequisites: ED 531 with B or better and ED 532 [B]

ED 537. MATHEMATICAL METHODS I: FOUNDATIONS OF NUMERICAL THOUGHT. (4 Credits)
Introduction to the fundamentals of mathematics teaching including the nature and goals of mathematical thinking, numeracy, inquiry, and related academic language of mathematics. Students are introduced to the high high-leverage practices of ambitious mathematics teaching, designing instructional sequences and selecting curriculum resources aligned to state science standards and research-based learning progressions.
Equivalent to: SED 514

ED 538. MATHEMATICS METHODS II: CYCLES OF ENACTMENT. (4 Credits)
Teacher candidates create instructional units based on student knowledge and skill while attending to needed accommodations. Designed to help the teacher candidate select or modify instructional materials based on student prior knowledge, experience, and interests; make accommodations for students; and provide for multiple representations across a unit of instruction.
Prerequisites: ED 537 with B or better
ED 539. MATHEMATICAL METHODS III: MATHEMATICS FOR EVERY LEARNER. (4 Credits)
Teacher candidates will develop practices that support all students, regardless of background or ability. The teacher candidate will design a unit of instruction with complex learning goals that are cross- and multi-disciplinary, draw on multiple perspectives, and involve higher order thinking and communication skills.
Prerequisites: ED 537 with B or better and ED 538 [B]

ED 540. HUMAN DEVELOPMENT AND PSYCHOLOGY OF THE ADOLESCENT. (3 Credits)
Examines research from psychology, human development, and neuroscience to provide a holistic understanding of adolescents and learning with a focus on the middle/secondary student. Investigates the influence of family, neighborhood, peer, and school contexts on brain development; identity formation; and the challenges and opportunities of adolescence.

ED 542. TEACHER LEADERSHIP. (3 Credits)
Examines current conceptions, research, and philosophies of educational leadership. The goal is to promote teacher-leadership in effective teaching and learning and influence in local educational policies and programs.
Equivalent to: TCE 542

ED 544. TEACHING CRITICAL LITERACY. (3 Credits)
Examines literacy curriculum and teaching practices in various real world contexts, such as critical literacy, supporting second language learners, argumentation, reading engagement and social justice. While still addressing technical dimensions of literacy education, students write critical literacy curricula, take turns leading critical book discussions, and learn to critique text bias. Course challenges students to develop critical consciousness as teachers of literacy in a democracy.

ED 548. STUDENTS WITH SPECIAL NEEDS. (2 Credits)
Explores the broad range of special needs that are represented in today's classrooms. Addresses various types and characteristics of disabilities as well as collaborating with specialists and families with children with special needs. Discussion strategies and instructional practices to enhance the learning of diverse students in the inclusive classroom.

ED 549. TEACHING IN A DIFFERENTIATED AND DIVERSE CLASSROOM. (3 Credits)
Addresses the philosophical framework, strategies, and assessment of differentiation to meet the needs of all students in the classroom.
Equivalent to: TCE 549

ED 550. THE EFFECTIVE TEACHING CYCLE I: FOUNDATIONS AND PLANNING. (4 Credits)
The first of three courses examining the iterative cycle of curriculum planning, instruction, and assessment. An introduction to learning theory and the relationship between teaching and learning provides the foundation. An overview of the complete teaching cycle leads to a focus on curriculum planning based on state standards.

ED 551. THE EFFECTIVE TEACHING CYCLE II: ASSESSMENT. (4 Credits)
The second of three courses examining the iterative cycle of curriculum planning, instruction, and assessment. Learning in this class will concentrate on assessment for and of learning and its importance to student engagement and advancement.
Prerequisites: ED 550 with B or better

ED 559. STRATEGIES FOR TEACHING HUMANITIES. (3 Credits)
Pedagogical approaches to teaching language arts and social studies in K-5, multiple subject classrooms. Focus on developing research-based daily lessons and unit plans that integrate curriculum, support national standards, and use an inquiry approach for student learning.

ED 560. CHANGES IN ESOL EDUCATION. (3 Credits)
Explores recent developments in education for K-12 emergent bilingual students, examining changes in theory, policy, and instruction. Practice-based projects draw on new language acquisition theories to address both language and content-knowledge development. Course work intended for K-12 teachers who earned an ESOL endorsement more than five years ago, as well as those with equivalent background knowledge.
Recommended: K-12 teaching license with ESOL endorsement

ED 561. ACTION RESEARCH. (1-3 Credits)
Examines action research as a vehicle for teacher and administrator professional development. Specific topics of study include problem posing, data collection and analysis, theory building, and writing the report.
Equivalent to: TCE 561
This course is repeatable for 3 credits.

ED 562. INTRODUCTION TO EDUCATIONAL RESEARCH. (3 Credits)
Explores the purpose and use of social science research in education with emphasis on action and applied research. Designed to help teachers and informal educators to critically read, interpret, and apply research findings to the diverse contexts in which they work, and to become informed consumers of educational research.
Equivalent to: TCE 562

ED 563. STRATEGIES FOR TEACHING PHYSICAL EDUCATION HEALTH & WELLNESS. (1 Credit)
Exploration of recent trends and research-based practices in the teaching of physical education, health, and wellness in elementary school. Includes instructional strategies for developing holistic learners though an effective wellness program.

ED 565. ELEMENTARY METHODS: LITERACY. (2-4 Credits)
Understanding the theoretical and developmental foundations for literacy programs K-5; targeted reading, writing, listening, vocabulary, and speaking skill needs assessments; organizational strategies for teaching literacy; understanding dyslexia and how to differentiate instruction for students with dyslexia; and the integration of cultural diversity and social justice into literacy learning.
This course is repeatable for 4 credits.

ED 566. ELEMENTARY METHODS: MATHEMATICS. (4 Credits)
Exploration of the teaching of early childhood/elementary school mathematics with emphases on problem solving, connections, representation, communication, reasoning and proof. Course will incorporate the development of mathematical models and mental constructs. Research-based, developmentally appropriate and culturally relevant practices will be incorporated into lessons.

ED 567. ELEMENTARY METHODS: NATURAL AND SOCIAL SCIENCE. (4 Credits)
Inquiry approaches to the teaching and learning of the natural and social sciences are used to explore the structure of the disciplines and support the creation of instructional units that develop disciplinary knowledge and practices/skills while highlighting cross-cutting themes. Scientific literacy and civic competence are emphasized.
ED 569. STRATEGIES FOR TEACHING THE FINE ARTS. (1 Credit)
Exploration of recent trends and research-based practices in the teaching of performing arts (dance, music, theater) and the visual arts in elementary school. Includes instructional strategies for developing holistic learners though an effective fine arts program.

ED 570. BILITERACY INSTRUCTION. (3 Credits)
Explores literacy development in Spanish and English. Examines differences in literacy development across the two languages, as well as pedagogical approaches that leverage students' home language and literacy practices. Explores equity and bias in classroom language practices. Taught bilingually in Spanish and English.
Prerequisites: ED 572 (may be taken concurrently) with C or better

ED 571. MULTILINGUAL LINGUISTICS. (3 Credits)
Explores linguistic categories: phonology, morphology, syntax, semantics, pragmatics, and discourse. Focuses on academic language development and teaching implications for emergent bilingual students in Spanish-English K-12 dual language programs. Taught bilingually in Spanish and English.
Prerequisites: ED 572 (may be taken concurrently) with C or better

ED 572. FOUNDATIONS OF ESOL EDUCATION. (3 Credits)
Examines characteristics of English language learners (ELLs), key theories in language acquisition, the role of culture in language development, and instructional program models for ELLs, while considering implications for classroom instruction.
Equivalent to: TCE 572

ED 573. INSTRUCTIONAL APPROACHES FOR ESOL EDUCATION. (3 Credits)
Examines characteristics of standards-based content-area instruction for emergent bilinguals. Includes integration of content and language development, classroom-based assessment, and use of technology to support student learning.
Prerequisites: ED 572 with C or better
Equivalent to: TCE 573

ED 574. PROJECT-BASED MATHEMATICS. (3 Credits)
Building on the foundational concepts covered in ED 457 and ED 466/ED 566, students will plan and apply project-based lessons. Students will transfer knowledge and skills of mathematics to real world problems and will learn to teach with a project-based approach.

ED 575. INTEGRATED STEM. (3 Credits)
Students will continue to develop their pedagogical content knowledge in science, technology, engineering, mathematics, and integrated STEM. Students will develop a deeper understanding of the crosscutting concepts common to all science endeavors and will learn how to use these concepts to bridge across science or STEM curriculum units. Students will also examine and develop expertise in using science and engineering practices to lead students in authentic inquiry. Integrating crosscutting concepts, science and engineering practices, and disciplinary core ideas, students will learn and practice the development of curriculum and instruction utilizing the engineering design process.

ED 576. PARTNERSHIPS AND IDEOLOGIES IN ESOL EDUCATION. (3 Credits)
Considers social and political issues pertaining to educating English language learners. Focuses on exploring multiple ideologies in ESOL and building partnerships across schools, families, and communities.
Prerequisites: ED 572 with C or better
Equivalent to: TCE 576

ED 577. DIFFERENTIATION FOR STUDENTS WITH SPECIAL NEEDS. (3 Credits)
Building on the foundational concepts covered in HDFS 431, this course goes into greater depth on how to provide students with a range of exceptionalities with education in the least restrictive environment. Teacher candidates will explore differentiated instruction techniques for students with special needs that can be used in both the regular education and pull out Special Education resource classrooms.

ED 578. SPECIAL EDUCATION LAW RIGHTS AND REGULATIONS. (3 Credits)
In-depth review of special education law and regulations that protect and provide educational rights for students with disabilities. Teacher candidates will leave the class understanding both the historical and current legal rights of students receiving special education and how to best meet those rights in both the regular and special education resource classrooms.

ED 579. LINGUISTICS FOR TEACHERS. (3 Credits)
Explores linguistic categories: phonology, morphology, syntax, semantics, pragmatics, and discourse. Focuses on teaching implications--from psycholinguistic, sociolinguistic, and critical perspectives--for emergent bilingual students in P-12 contexts.
Prerequisites: ED 572 with C or better
Equivalent to: TCE 579

ED 582. STRATEGIES FOR DEVELOPING LITERACY. (3 Credits)
Focus on teaching of reading to K-5 students. Instruction in pedagogical techniques and assessment on teaching vocabulary, comprehension, phonics and fluency. Strategies related to motivation to read, integration of cultural diversity and social justice and the needs of diverse learners in literacy development are also addressed.

ED 584. LANGUAGE ARTS METHODS I: ADOLESCENT LITERACY. (4 Credits)
Teaching language arts to middle and high school students requires a deep understanding of how reading and writing to learn occur. Guided by current professional and state literacy standards, students will learn to assess and advance adolescent reading comprehension, and writing and speaking skills.

ED 585. LANGUAGE ARTS METHODS II: STRATEGIES FOR GRADES 5-12. (4 Credits)
Explores the integration and implementation of curriculum and high leverage instructional practices that respond to the learning needs of adolescents in language arts classrooms. Examines the importance of metacognitive strategies in the teaching of content-related skills and concepts, and how to create school cultures that support high achievement.

ED 586. LANGUAGE ARTS METHODS III: CURRICULUM AND THE PROFESSION. (4 Credits)
Learning to teach language arts as a community of practice including the development of high-leverage instructional practices. Focus on enhancing classroom discourse and building student comprehension, meaning construction, interpretation, and response to complex text. Integration of technology tools for instruction and assessment.
Prerequisites: ED 584 with B or better and ED 585 [B]

ED 587. SOCIAL STUDIES METHODS I: ADOLESCENT LITERACY. (4 Credits)
Teaching social studies to middle and high school students requires a deep understanding of how reading and writing to learn occur. Guided by current professional and state literacy standards, students will learn to assess and advance adolescent content reading comprehension, writing and speaking skills.
ED 588. SOCIAL STUDIES METHODS II: STRATEGIES FOR GRADES 5-12. (4 Credits)
Explores the integration and implementation of curriculum and high leverage instructional practices that respond to the learning needs of adolescents in secondary social studies classrooms. Examines the importance of metacognitive strategies in the teaching of content-related skills and concepts, and how to create school cultures that support high achievement.

ED 589. SOCIAL STUDIES METHODS III: CURRICULUM AND THE PROFESSION. (4 Credits)
Learning to teach social studies as a community of practice including the development of high-leverage instructional practices. Focus on curriculum strategies that provide opportunities for learners to develop and use facts, concepts, interpretations, and analyses to build and support arguments. Integration of technology tools for instruction and assessment.
Prerequisites: ED 587 with B or better and ED 588 [B]

ED 590. SOCIAL JUSTICE IN EDUCATION. (3 Credits)
Examines social, environmental and ecological justice in educational settings focusing on bias critique in text, development of social justice curriculum, and creation of an action related to a social justice issue. The interconnectedness of social and ecological justice is also explored. Various international justice standards are used to ground students’ work in curriculum development.
Equivalent to: TCE 590

ED 592. TECHNOLOGY TOOLS FOR TEACHING. (1-2 Credits)
Teacher candidates will learn the technology skills needed to be successful as a classroom teacher. Topics range from exploration of how digital tools can be used in instruction, assessment, communication, and collaboration in educational settings to bring vibrant energy into student learning and engagement. The course also covers responsible digital citizenship, responsible use and ethics of technology in the classroom. This course is repeatable for 2 credits.

ED 594. DIFFERENTIATION. (2 Credits)
Issues of K-12 learner and the role of culture, language, and group identification in learning will be examined and applied to the consideration of differentiated instructional strategies.

ED 595. EDUCATIONAL DEVELOPMENT. (2 Credits)
Issues of K-12 learner social/emotional/cognitive development across multiple areas of learning will be examined, with consideration given to impact on classroom pedagogy.

ED 596. TECHNOLOGY FOR EDUCATORS. (3 Credits)
Explore the integration of current and emerging technologies into K-12 content areas by engaging learners in real world issues and learning in a social context. Integrate technologies that promote critical thinking, communication, collaboration, and creativity. Discuss technologies in terms of cultural linguistic diversity. Gain transferable skills. Taught via Ecampus only.
Equivalent to: TCE 596
Recommended: Basic computer literacy.

ED 597. K-5 STEM INTEGRATION IN DIVERSE CLASSROOMS. (2 Credits)
An investigation of theory and practice related to science teaching and learning in diverse classrooms through integration of science, math, literacy and social studies.

ED 599. SPECIAL TOPICS. (1-4 Credits)
Equivalent to: TCE 599
This course is repeatable for 90 credits.

ED 601. RESEARCH. (1-16 Credits)
Equivalent to: TCE 601
This course is repeatable for 16 credits.

ED 602. INDEPENDENT STUDY. (1-16 Credits)
Equivalent to: TCE 602
This course is repeatable for 16 credits.

ED 603. THESIS. (1-16 Credits)
Equivalent to: TCE 603
This course is repeatable for 999 credits.

ED 605. READING AND CONFERENCE. (1-16 Credits)
Equivalent to: TCE 605
This course is repeatable for 16 credits.

ED 606. PROJECTS. (1-16 Credits)
Equivalent to: TCE 606
This course is repeatable for 16 credits.

ED 607. SEMINAR. (1-16 Credits)
Equivalent to: TCE 607
This course is repeatable for 16 credits.

ED 608. WORKSHOP. (1-16 Credits)
Equivalent to: TCE 608
This course is repeatable for 16 credits.

ED 609. PRACTICUM/CLINICAL EXPERIENCE. (1-16 Credits)
Equivalent to: TCE 609
This course is repeatable for 16 credits.

ED 610. INTERNSHIP. (1-15 Credits)
Equivalent to: TCE 610
This course is repeatable for 15 credits.

ED 650. EQUITY AND EDUCATION POLICY. (3 Credits)
Introduces students to key educational policy debates, with a particular focus on attempts to use education policy to advance equity. Examines different visions for the purpose of education and different definitions of equity. Explores the roles of different actors within education policy, including legislators, courts, and non-governmental organizations. Provides students with frameworks for analyzing education policy, which students will then apply to analyze a current policy debate that is of interest to them.

ED 651. RESEARCH BILINGUALISM AND MULTILINGUALISM. (3 Credits)
Develops critical research skills to create new knowledge in the field of multilingualism. Examines interdisciplinary and intersectional perspectives to consider notions of identity among multilinguals and explore the historical trajectory of bilingualism and multilingualism research. Provides a broad understanding of the theoretical and methodological frameworks used to study bilingualism and multilingualism in globalized contexts.

ED 652. ETHNOGRAPHIC METHODS. (3 Credits)
As an advanced qualitative method class, this course introduces theory and ethnographic research methods by presenting the various ways by which socio-cultural anthropologists observe and analyze phenomena, groups or individuals in everyday language and social practices in their local and global contexts, taking into account issues of language, equity and educational policy. Students will carry out an ethnographic research project of a particular phenomenon they wish to learn more about.
Prerequisites: SED 622 with B or better
ED 653. DISCOURSE, IDENTITY AND EDUCATION. (3 Credits)
Builds a foundation in discourse theory and its applications to identity and education. Includes empirical studies that draw from particular lenses of discourse theory, exemplifying how these scholars organize the design, implementation, and discussion of research around discourse theory. Develops knowledge of discourse theory to propose a study that could be conducted drawing from discourse analytic perspectives.

ED 808. WORKSHOP. (1-4 Credits)
Equivalent to: TCE 808
This course is repeatable for 16 credits.