ELEMENTARY EDUCATION (E ED)

E ED 250 Teaching and Learning Beyond the Classroom (Units: 3)
Analysis and exploration of how children learn from the local, natural, and built environment. Examining the practice of teaching social studies and science through the use of local historical and educational sites. (Plus-minus letter grade only) [Formerly EDUC 250/E ED 250]
Course Attributes:
- D1: Social Sciences

E ED 306 Collaborations and Partnership with Families in ECE (Units: 3)
Prerequisite: Upper-division standing or consent of the instructor.
Theory and practical models for understanding and working with diverse children and families in and out of school settings. There is a requirement of 30 hours of classroom observation and participation per semester when enrolled in one or more undergraduate ECE courses.

E ED 333 Dynamic Educators for the 21st Century (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Developing a philosophy through critical literacies stances (a way of being, not activities) toward teaching and learning based on social justice and equity. Focus on teaching and learning as multi-dimensional interactive processes. Investigate, articulate theories and practices to develop students' inquiry through integrated curriculum research-based projects for grades Kindergarten-8th grade. (This course is offered as EDUC 333 and E ED 333. Students may not repeat the course under an alternate prefix.)

E ED 450 Art and Learning (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.
Principles and practices of curriculum planning and instruction for teaching art to K-5 children. Discussions of theory and practice coincide with hands-on art making and curriculum development. Lecture, 2 units; activity, 1 unit. Extra fee required. [Formerly EDUC 450/E ED 450, ART 450]
Course Attributes:
- E1: Lifelong Learning Develop
- UD-C: Arts and/or Humanities
- Social Justice

E ED 602 Advanced Curriculum Study in ECE (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.
Advanced integrated curricular development for young children in culturally and linguistically responsive early childhood setting. Introducing diverse early childhood curricular and discussing DAP teaching and learning materials. Theory, practice, and policy related to creating and implementing integrated curriculum for high-quality ECE programs. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.
Course Attributes:
- UD-D: Social Sciences
- Am. Ethnic & Racial Minorities
- Social Justice

E ED 603 Promoting Young Children's Social and Emotional Development (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4; PSY 330; or consent of the instructor.
Theories and educational programs focusing on children's social and emotional development in culturally responsive early childhood settings. Attachment relationships, prosocial behavior, self-esteem, identity formation, friendships, guidance, and classroom management. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses. (Plus-minus letter grade only)
Course Attributes:
- UD-D: Social Sciences
- Am. Ethnic & Racial Minorities
- Social Justice

E ED 604 Advanced Issues in Collaboration with Families and Communities in ECE (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.
Understanding and overcoming obstacles to effective communication between educators and parents through conferences, home visits, participation on boards and committees, and problem-solving experiences. The rationale for parent involvement. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.
Course Attributes:
- UD-D: Social Sciences
- Am. Ethnic & Racial Minorities
- Social Justice

E ED 600 Advanced Issues in Child Development and Learning (Units: 3)
Prerequisite: Upper division standing.
Child development from infancy to school age. Social, emotional, cognitive, and physical development related to practical implications for programs. Developmental learning sequences in relation to curriculum and teaching styles. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.
E ED 605 Supervised Student Teaching in Observation and Evaluation in ECE (Units: 3)
Prerequisite: E ED 600 or E ED 610 (may be taken concurrently).
Supervised field experience in an infant, preschool, or school-age daycare program. Techniques of observation and other evaluations will be practiced and used to develop individualized learning experiences. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.

E ED 607 Leadership and Administration in ECE (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Ingredients necessary for a functioning staff in child development programs. Dynamics of an interdisciplinary early childhood team: administrators, teachers, parents, and support personnel. Development of roles and communication skills. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.

E ED 608 Supervised Fieldwork: Preschool Curriculum Development (Units: 3)
Prerequisites: E ED 602 and E ED 610 (may be taken concurrently).
Field experience in an infant, toddler, preschool setting. Implementation of integrated curriculum. There is a requirement of 9 hours per week of classroom observation/participation in an approved licensed children facility.

E ED 610 Classroom Assessment and Evaluation for Young Children (Units: 3)
Prerequisites: CFS 320, PSY 330, and consent of instructor.
Observation and assessment of children’s behavior and development in diverse early childhood settings and communities. Informal observational techniques, role of assessment in curriculum planning. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses. (Plus-minus letter grade only)

E ED 611 Advanced Issues in Infant-Toddler Education and Care (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Thorough and practical examination of developmental theory from 0-3 years. Practical applications to planning group programs in a variety of settings. Role of relationships as seen in many contexts. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.

E ED 613 Integrated Arts Curricula in ECE (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.
Exposure to modes for creative self-expression available to young children. Theories of creativity applied to developing teaching techniques. Visual arts, music and movement, and how to set up and teach in a learning center for creative arts. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.

E ED 614 Science, Math, and Technology Curricular in ECE (Units: 3)
Prerequisite: Upper division standing.
Development of problem solving abilities related to mathematics and science for preschool-age children. Materials and techniques for teaching using an inquiry approach while incorporating everyday experiences. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.

E ED 615 Environmental Education in ECE (Units: 3)
Prerequisite: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.
Helping teachers of young children to explore their sense of wonder and connection with the out-of-doors. Finding nature in the city and expanding outdoor experiences. Field trips to study sites throughout the Bay area. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.

E ED 616 Language and Literacy in Multilingual ECE Settings (Units: 3)
Prerequisite: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.
Children’s language learning in culturally and linguistically diverse early childhood settings. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.

E ED 619 Children’s Play: Theory and Practice (Units: 3)
Prerequisite: Upper division standing.
The role of play in the development of young children. The educator’s role in providing an environment which is physically safe, intellectually challenging, and emotionally nurturing, where young children have maximum opportunity to learn through play. Designing environments and programs that recognize the importance of play. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.
E ED 639 Bilingual Education in the U.S.: A History of Struggle, Resistance, and Achievement (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.

Examination, exploration and analysis of the history of bilingual education and its impact on educational opportunities for culturally and linguistically diverse students in the U.S. (Plus-minus letter grade only)
Course Attributes:
- UD-D: Social Sciences

E ED 640 Gear Up Tutors in Schools (Units: 3)
Prerequisite: Must be accepted in the GEAR UP program.

Explore and identify best educational practices to prepare middle school students in San Francisco for college level studies and to gain access to higher education. May be repeated for 18 units. (CR/NC grading only)

E ED 642 Integrating Content Knowledge & Teaching Practices toward a Multiple Subj Cred.: Elem. School (Units: 3)
Prerequisite: Upper division standing or consent of instructor.

Integrating content knowledge and teaching practices on issues related to teacher preparation; content integration, test analysis, focused practice; state adopted academic content standards in the teaching profession. May be repeated for a total of 6 units, but only three units may count toward the minor in elementary education. (CR/NC grading only)

E ED 645 Directed Experiences with Children (Units: 1-3)
Prerequisite: Upper-division standing or consent of the instructor. Registration by recommendation of adviser and consent of the instructor.

Individually guided observation and participation experiences with children in elementary school. May be repeated for a total of 5 units. [CSL may be available]

E ED 655 Hands-on Undergraduate Science Education Experience (Units: 3)
Prerequisite: Restricted to students with upper-division standing.

Application of knowledge of core science concepts to the teaching of elementary school children; design, implement and analyze the effectiveness of inquiry-based science learning activities to explore how children learn science.

E ED 668 Multicultural Education and Social Justice for Young Children (Units: 3)
Prerequisite: Upper division standing.

Introduces approaches for integrating education about diversity in early childhood programs. Helping young children develop positive self concept and attitudes about gender, race, ethnicity, and disabilities. Critical thinking skills for challenging bias and thriving in multicultural society. There is a requirement of 30 hours of classroom observation/participation per semester when a student is enrolled in one or more undergraduate ECE courses.

E ED 681 Teaching Language and Literature with Elementary and Middle School Students (Units: 3)
Prerequisites: Successful completion of GE Areas A1, A2, A3, and B4 or consent of the instructor.

Introduction to children's literature from picture books to chapter books. Topics include the history of children's literature, use of children's literature in the preschool to grade 8 classroom, multicultural and multilingual children's literature, and author and genre study. (Plus-minus letter grade only)
Course Attributes:
- UD-C: Arts and/or Humanities

E ED 687 Seminar: Field Experience (Units: 2-3)
Prerequisite: Enrollment limited to Multiple Subject Credential candidates.

Understanding school and classroom culture, roles of the teacher in contemporary urban school settings. Instruction, teaching, evaluation, professional responsibilities and opportunities, and community relationships. Application of theory to practice. May be repeated for a total of 6 units. (CR/NC grading only)

E ED 699 Independent Study (Units: 1-3)
Prerequisite: Upper-division standing or consent of the instructor.

An intensive study of a particular problem under the direction of a member of the department. Enrollment by petition approved by the instructor, adviser, and department chair. Open to regularly enrolled students only. May be repeated for a total of 6 units.

E ED 700 Early Childhood Socialization in a Culturally Diverse Community (Units: 3)
Prerequisite: Graduate socialization or consent of the instructor.

Theory and research on children's social, emotional, and physical development across sociocultural contexts. Relationship to children's learning, implications for early childhood education, and the design of quality programs for young children (0-8 years). (Plus-minus letter grade only)

E ED 701 Social, Cultural, and Historical Foundations of Education (Units: 3)
Prerequisites: Multiple Subject Credential and Bilingual Authorization students or approval of an E ED Advisor.

Examines, from a critical perspective, historical, social, and cultural foundations for theoretical frameworks and pedagogical practices for the classroom.
Course Attributes:
- Teacher Credential Program Crs

E ED 703 Family Literacy Studies of the Elementary Age Child (Units: 3)
Prerequisite: Admission to MA in Elementary Education Program.

Research and theory of cross-cultural family literacy practices. Patterns of parent engagement in elementary age students' home and school literacy practices. (Plus-minus letter grade only)
E ED 704 Play and the Artistic Lives of Children (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.

The role of young children's play in cross-cultural educational and community settings. Innovative practices and curriculum for promoting positive and meaningful play experiences in and out of school. (Plus-minus AB/NC)

E ED 705 Exploring Child and Adolescent Literature (Units: 3)
Prerequisite: Preliminary teaching credential or candidate in the Multiple Subject Credential program.

Exposure to a wide-range of child and adolescent literature. Examination of teaching methods and literature for use in the TK, elementary and secondary classroom. Author study and bookmaking.

E ED 707 Early Development and Learning in Diverse and Inclusive Settings (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.

Theory and research on children's (0-8 years) intellectual development as framed by sociocultural contexts. Application to instruction, curriculum development, and design of environments for young children. (Plus-minus letter grade only)

E ED 708 Language and Literacy in the Early Years (Units: 3)
Prerequisite: Consent of the instructor.

Theory, research, and practice related to children's early language and literacy learning. Emphasis on multilingualism and multiliteracies. Implications for teaching, policy, and leadership. Additional emphasis on curricular approaches and assessment. (Plus-minus letter grade only)

E ED 709 Instructional Leadership and Program Curriculum Evaluation in Early Childhood Education (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.

Analyze and re-interpret various theories that have influenced and shaped ECE curricula; discuss who decides the context of knowledge, instructional methods, as well as the evaluation system in contemporary ECE practices. Implications for teaching, leadership, and advocacy. Additional emphasis on program evaluation. (Plus-minus letter grade only)

E ED 710 Children's Early Literacy Development in Early Childhood Education (Units: 3)
Prerequisite: Graduate standing or consent of instructor.

Theory, practice, and policy on children's (0-8 years) acquisition of written language in multicultural setting. Emphasis on role of culture and socialization, and practical applications of successful classroom and childcare instruction.

E ED 711 Chinese Heritage Language for the Bilingual Teacher Candidates (Units: 3)
Prerequisite: Multiple Subjects Credential and Bilingual Authorization students or approval of an Elementary Education Advisor.

Continue the advancement of the Chinese proficiency for students seeking to become teachers in bilingual classrooms. Participate in speaking, reading, writing, listening, and culture development. Focus on pedagogical strategies to teach bilingual Chinese and second language learners in elementary classroom settings and address the vast linguistic and cultural diversity of Chinese in the United States. (Plus-minus AB/NC)

E ED 712 Teaching Reading and Language Arts - Chinese Bilingual (Units: 3)
Prerequisite: Multiple Subject Credential and Bilingual Authorization Chinese students or approval of an E ED Advisor.

Prepares elementary school teacher candidates with theories and research findings to teach reading and language arts in Chinese. Systematic and explicit instruction in teaching comprehensive Chinese literacy includes oral language, reading strategies, vocabulary, and writing development.

E ED 713 Spanish Heritage Language for the Bilingual Teacher: I (Units: 3)
Prerequisite: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

Development of Spanish proficiency for the bilingual teacher in listening, speaking, reading and writing, and using culturally responsive instruction. Pedagogical strategies and preparation for becoming reflective practitioners. Addresses linguistics and cultural diversity of Latinos/as in the USA.

Course Attributes:
- Teacher Credential Program Crs

E ED 714 Spanish Heritage Language for the Bilingual Teacher: II (Units: 3)
Prerequisites: Enrolled in the Multiple Subject Credential Program, Bilingual Authorization (Spanish); E ED 713.

Demonstration of competency in applied linguistics, pedagogical theories and practices as these are designed, planned and implemented in Spanish bilingual classroom settings.

E ED 715 Families in Early Childhood Settings and Communities (Units: 3)
Prerequisite: E ED 717 or consent of instructor.

Research, policy, and practice related to young children and families in diverse early childhood settings and communities. Family structures, cultural perspectives, family-school relationships, family literacy, and outreach programs. (Plus-minus letter grade only)

E ED 717 Narrative Inquiry and Memoir in Early Childhood Education (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.

Focus on autobiographical accounts (memoir) and stories (narrative inquiry) for understanding teaching and learning. Practical applications for teaching, leadership, and the use of narrative inquiry for qualitative research.

E ED 720 Research and Practice in Language and Literacy Education (Units: 3)
Prerequisite: ISED 797.

Introduction to leading ideas in quantitative and qualitative methods in educational research that focus on language and literacy; identification of research questions, review of literature, research problems, research plans, design issues, data analysis, instrument construction, data analysis, and reporting. (Plus-minus letter grade only)
E ED 721 International Education in Early Childhood and Elementary Education (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.

Interdisciplinary focus on research, policy, leadership, and practice relating to international education in early childhood and elementary school. Topics include international school structures, school demographics, philosophies of schooling, curricula, immigration, gender, and student achievement. (Plus-minus letter grade only)

E ED 723 Inservice Leadership in Reading (Units: 3)
Prerequisite: Consent of adviser and course instructor.

Development of professional growth in reading; determining staff needs; designing programs of in-service education; problems of consultation and program development, aiding in development of curriculum and improvement of instruction. (Plus-minus letter grade only)

E ED 725 Classroom Issues in Language, Literacy, and Culture (Units: 3)
Prerequisite: Consent of instructor.

Research and theory on language and literacy development in linguistically and culturally diverse communities and classrooms; first and second language acquisition; emergent literacy; implications of research for culturally responsive teaching and classroom organization. (Plus-minus letter grade only)

E ED 726 Engaging Young Writers in Classroom Settings, TK-12 (Units: 3)
Prerequisite: Preliminary teaching credential or candidate in the Multiple Subject Credential Program.

Introduction to theories and practices of teaching writing in elementary and secondary level classrooms. Writing research, methodology, student assessment, and literature connections.

E ED 737 Teaching Social Studies, Social Justice, and Literacy: Grades 3-6 (Units: 3)
Prerequisites: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

Frameworks and methods for implementing integrated curriculum in elementary schools with a focus on social studies content and social justice perspective. Instruction in use of effective expository literacy strategies for students in grades 3 to 6. Field practicum required. (Plus-minus letter grade only)

Course Attributes:

- Teacher Credential Program Crs

E ED 746 Teaching Practicum Phase I (Units: 3)
Prerequisites: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

Developmental field experience in a public elementary school under the guidance of a resident teacher. Teaching is planned and practiced at the beginning level based on California State standards. (CR/NC grading only)

Course Attributes:

- Teacher Credential Program Crs

E ED 747 Teaching Practicum Phase II (Units: 3)
Prerequisites: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

Developmental field experience in a public elementary school under the supervision of a resident teacher. Teaching is planned and practiced at the developmental level based on California State standards. (CR/NC grading only)

Course Attributes:

- Teacher Credential Program Crs

E ED 748 Teaching Practicum Phase III (Units: 3-7)
Prerequisites: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

The final phase of student teaching conducted in a public elementary school under the supervision of a resident teacher. Planned and practiced at the competency level. Assessment based on California state standards. May be repeated for a total of 12 units. (CR/NC grading only)

Course Attributes:

- Teacher Credential Program Crs

E ED 749 Second Language Acquisition in the Elementary School (Units: 3)
Prerequisite: Graduate standing or consent of instructor.

First and second language acquisition theories and their relationship to second language learning; psychological, social, and linguistic aspects of second language acquisition of children; socio-political factors related to language issues. (Plus-minus letter grade only)

Course Attributes:

- Teacher Credential Program Crs

E ED 756 Teaching Practicum Seminar Phase I (Units: 3)
Prerequisites: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

This course is linked to E ED 687 Student Teaching Practicum Phase I in the Multiple Subject Credential Program. Content supports candidates in their field experience along with the following categories: Developing lesson plans, beginning teaching, and assessing all students across elementary school curriculum; guidance in classroom management, examination of the Teaching Performance Expectation Professional Standards, examining Inclusion MTSS, and reading, discussing, analyzing, and linking theories on teaching and learning. (Plus-minus letter grade only)

Course Attributes:

- Teacher Credential Program Crs
E ED 757 Teaching Practicum Seminar Phase II (Units: 1-3)
Prerequisites: E ED 746, E ED 756, E ED 701, E ED 749, E ED 784 (or E ED 777). Must be taken concurrently with E ED 747, E ED 782, E ED 777 (or E ED 784).

Course Attributes:
- Teacher Credential Program Crs

E ED 758 Teaching Practicum Seminar Phase III (Units: 1-3)
Prerequisites: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

Prerequisite: Consent of Elementary Education adviser or instructor.

Course Attributes:
- Teacher Credential Program Crs

E ED 760 Seminar on Social Issues and Curriculum Development (Units: 3)
Prerequisite: Graduate standing or consent of instructor.

Social issues and their influence on school organization and curriculum development. Patterns of organization and curriculum in elementary schools. (Plus-minus letter grade only)

E ED 761 School Mathematics: Problem Solving (Units: 3)
Prerequisite: Restricted to graduate students in the Secondary Education MA or Single Subject Credential program.

Curriculum development in mathematics. Problem solving strategies as a unifying theme for content selection. (Plus-minus letter grade only)
(This course is offered as E ED 761 and S ED 761. Students may not repeat the course under an alternate prefix.)

E ED 763 Integrating Language, Literacy, and Technology in Elementary School Curriculum (Units: 3)
Prerequisite: Consent of Elementary Education adviser or instructor.

Prepare elementary school teachers to provide English language arts instruction that is enhanced by the thoughtful and effective integration of technology. (Plus-minus letter grade only)

E ED 764 Elementary School Social Studies (Units: 3)
Prerequisite: Consent of Elementary Education adviser or instructor.

Curriculum development in social studies methods, materials, and curriculum sequence. (Plus-minus letter grade only)

E ED 765 Elementary School Science (Units: 3)
Prerequisite: Consent of Elementary Education adviser or instructor.

Curriculum development in science methods, materials, and curriculum sequence. (Plus-minus letter grade only)

E ED 766 Elementary School Creative Arts (Units: 3)
Prerequisite: Consent of Elementary Education adviser or instructor.

Curriculum development in creative arts methods, materials, and curriculum sequence. (Plus-minus letter grade only)

E ED 769 Practitioner Research in Elementary Classrooms (Units: 3)
Prerequisite: Multiple subject credential or consent of instructor.

Examination of methods of practitioner research that allow teachers to address problems of practice as they arise in the classroom. Students become familiar with relevant research literature and engage in targeted practitioner research relevant to their current teaching placement.

E ED 770 Teaching Integrated Literacy and Assessment, TK-5 (Units: 3)
Prerequisite: Preliminary teaching credential or candidate in the Multiple Subject Credential Program.

On-going classroom instructional strategies highlighting Integrated approach to content and literacy acquisition. Administration and interpretation of a variety of assessments to identify and design instructional intervention. (AB/NC grading only)

E ED 771 Literacy Clinic II: Multidisciplinary Assessment and Remediation of Language and Literacy Problems (Units: 3)
Prerequisite: E ED 770.

Theory and proficiency in the practice and adaptation of test administration skills and interactive instructional strategies. Students assess and tutor K-12 children with reading and language problems. (AB/NC grading only)

E ED 772 Literacy Education Clinic I (Units: 1-3)
Prerequisites: Candidate in Reading Specialist Credential Program; must be taken concurrently with E ED 770.

Teach one-to-one struggling readers or provide instruction to small groups of struggling readers in an elementary school setting. Candidates use intervention strategies to improve reading. (CR/NC only)

E ED 773 Literacy Education Clinic II (Units: 1-3)
Prerequisites: Reading Specialist Candidate; E ED 770; and concurrent enrollment in E ED 771.

Teach in a school setting using intervention reading strategies to assist and support struggling readers who are adolescents. (CR/NC only)

E ED 774 Curriculum and Instruction in Science (Units: 3)
Prerequisite: Multiple Subjects Credential and Bilingual Authorization students or approval of an Elementary Education Advisor.

Preparation to teach in an elementary school classroom. Focused on lesson planning and implementing effective instructional pedagogies that integrate literacy along with supporting content access to bilingual learners in science. Particular attention is paid to developing lessons based on the Next Generation Science and Standards (NGSS). Active engagement in doing science, plus discussing, reading, and writing about science. (Plus-minus letter grade only)

Course Attributes:
- Teacher Credential Program Crs
Elementary Education (E ED)  Curriculum, Instruction, and Assessment for Teacher Leaders (Units: 3)  Prerequisite: E ED 760.

Curriculum, instruction, and assessment for elementary teachers. Examination of the role of leaders in teaching and learning and high quality professional development. (AB/NC grading only)

E ED 782 Teaching Reading and Language Arts: K-5 (Units: 3-4)  Prerequisites: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

Candidates will learn about research-based teaching practices for elementary school literacy instruction for diverse linguistic and cultural learners. Systematic and explicit theories and pedagogical instructional approaches to teaching a comprehensive literacy curriculum in grades from Transitional Kindergarten through fifth grade. Course content addresses oral language, reading, and writing development. (Plus-minus letter grade only)

Course Attributes:
- Teacher Credential Program Crs

E ED 783 Developmental Teaching and Learning in Diverse School Settings, K-8 (Units: 3)  Prerequisites: Acceptance to MSC program; could be taken concurrently with E ED 701, E ED 749, E ED 782, E ED 784 or E ED 777.

Theory and research based examination of cognitive, social-emotional, ethical, and physical development in sociocultural contexts including special populations. Impact of culture, family, community, and school. Guided experience in schools. (Plus-minus letter grade only)

Course Attributes:
- Teacher Credential Program Crs

E ED 784 Curriculum and Instruction in Mathematics (CLAD Emphasis) (Units: 3)  Prerequisite: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

Investigate methods and materials for teaching mathematics to linguistically and culturally diverse elementary school children. Learn about equity and social justice issues central to teaching and learning mathematics, mathematics classroom organization, assessment, and problem-solving based learning in an elementary classroom. Explore the specific social, structural, and historic contexts of teaching and learning mathematics to marginalized communities. (Plus-minus letter grade only)

Course Attributes:
- Teacher Credential Program Crs

E ED 785 Literacy Theories: Connections to Classroom Practices (Units: 3)  Prerequisite: Enrolled in Elementary Education MA Concentration in Language and Literacy.

Research on literacy theories that have influenced education in the US. Examination of critical literacy theories, research, and the connections to classroom practices in elementary schools.

E ED 786 Seminar in Developmental Teaching and Learning (Units: 3)  Prerequisites: Multiple Subjects Credential and Bilingual Authorization students; or approval of an Elementary Education Advisor.

Theory and research-based examination of cognitive, social-emotional, ethical, and physical development of children in sociocultural contexts. Examine the interrelated impacts of culture, family, community, and school on development. Examine educational research and consider its applications in practice to learn how to create positive and productive learning environments for all students. Emphasis on the development of reflective practice and students are required to apply research on learning and development to their teaching directly. (Plus-minus AB/NC grading)

E ED 787 Foundations in Social Studies Curriculum and Instruction (Units: 3)  Prerequisite: Restricted to Multiple Subject Credential Program students.

Curriculum and instruction in elementary classrooms. Development of a critical perspective assists candidates in forming an educational philosophy derived from social justice and English Language Development (ELD) perspectives for culturally and linguistically diverse classrooms.

E ED 788 Curriculum and Instruction in Mathematics for Bilingual Teachers II: Deepening Content and Pedagogy (Units: 3)  Prerequisites: Restricted to Multiple Subject Credential Bilingual Program students; E ED 784.

Necessary language to teach mathematics in Spanish and English, and pedagogical content knowledge for teaching algebra, geometry, and probability for K-8. Curriculum development, assessment techniques, and culturally responsive practices are emphasized. (Plus-minus letter grade only)

E ED 796 Analyzing Cases of Mathematical Teaching (Units: 3)  Prerequisite: Graduate standing or consent of instructor.

Cases of mathematics teaching practice are a catalyst for analytic discussion of assessment, mathematical representation, and student misconceptions. Teaching decisions are evaluated in the context of real classroom situations with regard to their impact on student learning, motivation, and beliefs. (Plus-minus letter grade only)

(This course is offered as E ED 796 and S ED 796. Students may not repeat the course under an alternate prefix.)

E ED 799 Pact Independent Plan (Units: 1-3)

E ED 801 Practitioner Inquiry and Early Childhood Professional Development and Administration (Units: 3)  Prerequisites: E ED 700, E ED 707, and E ED 708; or consent of the instructor.

Application of practitioner research for developing and evaluating early childhood curricula. Reflective practice and collaborative action research methodologies for coordination and administration of curricula. (Plus-minus letter grade only)

E ED 806 Organizational Development, Management, and Adult Supervision (Units: 3)  Prerequisite: Graduate standing or consent of the instructor.

Comprehensive study and training in current research, theory, and implementation of administration and leadership goals, strategies, and programs for young children, families, and educators. Adult supervision, leadership, and advocacy in early childhood settings. (Plus-minus letter grade only)
E ED 807 Leadership Development in Mathematics Education (Units: 3)
Prerequisite: Consent of instructor.
Enhancement and development of mathematical ideas and instructional methodologies from a classroom perspective to a theoretical framework. Knowledge of curriculum development and leadership skills; dissemination to other teachers. (This course is offered as E ED 807 and S ED 807. Students may not repeat the course under an alternate prefix.)

E ED 820 Theory and Methods in Infant and Toddler Education (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.
Seminar in infant-toddler development. Theory, research, and practice in diverse settings. Temporary issues in infant-toddler care, cross-cultural perspectives, and caregiver models. (Plus-minus letter grade only)

E ED 825 Early Childhood Education Policy and Advocacy: Quality, Access, and Equity (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.
Theory, research, and practice on the role and impact of public policy on early care and education. Implications for teaching, policy, and leadership. Emphasis on becoming an active, engaged, and informed advocate for early childhood education. (Plus-minus letter grade)

E ED 850 Mathematics and Science Inquiry for Children (Units: 3)
Prerequisites: E ED 700, E ED 707, and E ED 708; or consent of the instructor.
Planning, developing instructional materials, and evaluating learning experiences for children ages pre-kindergarten to eight in mathematics and the life and physical sciences. (Plus-minus letter grade only)

E ED 856 Assessing Mathematical Thinking (Units: 3)
Prerequisite: Consent of instructor.
Assessment strategies for classroom use; dimensions of students' mathematical thinking and learning. Development of performance assessments includes open-ended tasks and portfolios. (This course is offered as E ED 856 and S ED 856. Students may not repeat the course under an alternate prefix.)

E ED 869 Enhancing Access for Bi-Literate Learner, TK-12 (Units: 3)
Prerequisite: Preliminary teaching credential or candidate in the Multiple Subject Credential program.
Introduction to theories on language development for bilingual and bi-literate learners from preschool to 12th grade. Examining how bi-cultural and bilingual students develop bi-literacy. Investigating research-based instructional strategies that provide curriculum access to students in classroom settings. (Plus-minus letter grade only)

E ED 878 Critical Perspectives and Reconceptualizing Early Childhood Education (Units: 3)
Prerequisite: Graduate standing or consent of the instructor.
Theory, research, and practice on culturally responsive methods in early childhood education. Emphasis on critical thinking, critical perspectives, and reconceptualizing early childhood education in the multicultural global society. Implications for teaching, leadership, and advocacy. Raises questions but does not supply ready answers. Encourages political activism, but does not dictate political positions. Invites opinions and experiences. (Plus-minus letter grade only)

E ED 882 Literacy Instruction in K-12 Classrooms (Units: 3)
Prerequisite: Graduate standing or consent of instructor.
Methods, materials, and assessment for teaching diverse reading/language arts to linguistically and culturally diverse students in grades K-12; linguistic and print concepts; reading comprehension; developmental strategies; guided experiences in schools. Preliminary Level I primarily intended for Education Specialist Credential students.

E ED 890 Seminar on Field Studies in the Elementary Classroom (Units: 3)
Prerequisite: IS ED 797.
Topics in early childhood and elementary education: classroom-based research methods and reflective practice; planning and implementation of research, including literature review, research design, data collection, analysis, and presentation of findings. (CR/NC grading only)

E ED 895 Field Study (Units: 3)
Prerequisite: Consent of the instructor and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies before registration. Alternative culminating study for the Master of Arts in Education conducted under the direction of a graduate major adviser.

E ED 896 Field Study (Units: 3)
Prerequisites: Consent of instructor and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies.
An intensive study of a particular problem under direction of a member of the department. Open only to regularly enrolled students. Advancement to Candidacy (ATC) and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration. (CR/NC/RP grading only)

E ED 898 Master's Thesis (Units: 3)
Prerequisites: Consent of instructor and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies.
An intensive study of a particular problem under direction of a member of the department. Open only to regularly enrolled students. Advancement to Candidacy (ATC) and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration. (CR/NC/RP grading only)

E ED 899 Independent Study (Units: 1-3)
Prerequisite: Enrollment by petition approved by the instructor, adviser, and department chair. Open only to regularly enrolled students.
An intensive study of a particular problem under direction of a member of the department.