

# EDUC-EDUCATION

## EDUC 1110. Freshman Orientation

### 1 Credit (1)

Introduction to the university and to the College of Education. Discussion of planning for individualized education program and field experience.

Restricted to Las Cruces campus only. May be repeated up to 1 credit.

### Learning Outcomes

1. Demonstrates knowledge of and uses theories, approaches, methods, and techniques for teaching, reading, writing, and other academic skills in English and the native language.
2. Demonstrates knowledge of and applies management techniques appropriate to classrooms containing students who have varying levels of proficiency and academic experience in both languages.
3. Community/Family Involvement- The bilingual teacher: (a) Recognizes the importance of parental and community involvement for facilitating the learner's successful integration to his/her school environment. (b) Demonstrates knowledge of the teaching and learning patterns of the students' home environment and incorporates these into the instructional areas of program.
4. Assessment- The bilingual teacher: (a) Assesses oral and written language proficiency in academic areas in both languages utilizing the results for instructional placement, prescription, and evaluation. (b) Evaluates the growth of the learner's native and second language in the context of the curriculum. (c) Continuously assesses and adjusts her or his own language use in the classroom in order to maximize learner comprehension and verbal participation

## EDUC 1120. Introduction to Education

### 2 Credits (2)

Introduction to the historical, philosophical, sociological foundations of education, current trends, and issues in education; especially as it relates to a multicultural environment. Students will use those foundations to develop effective strategies related to problems, issues and responsibilities in the field of education. Restricted to Las Cruces campus only. May be repeated up to 2 credits.

### Learning Outcomes

1. Describe the teaching and learning of various American education settings including early childhood, elementary, middle school, high school, and special education.
2. Describe how teachers use educational theory and the results of research of students' learning.
3. Explain the techniques for establishing a positive and supportive environment in the classroom
4. Identify and describe instructional strategies supported by current research to promote thinking skills of all learners.
5. Recognize the teachers' role and responsibilities in an increasingly diverse, multicultural society.

## EDUC 1140. Math for Paraprofessionals

### 3 Credits (3)

Applied math skills for paraprofessionals working with children. May be repeated up to 3 credits.

**Prerequisite:** CCDM 103 N.

### Learning Outcomes

1. Students will plan developmentally appropriate math activities for young children.
2. Students will plan adaptations to math activities for children with diverse abilities.

3. Students will demonstrate understanding of recent research in methods of teaching mathematics.
4. Students will demonstrate understanding of early childhood theories as they relate to the teaching of mathematics.
5. Students will demonstrate understanding of unique needs of children from diverse economic or cultural backgrounds.

## EDUC 1150. Math for Paraprofessionals II

### 3 Credits (3)

Applied math skills for paraprofessionals working under the direction of a teacher. May be repeated up to 3 credits.

**Prerequisite:** EDUC 1140.

### Learning Outcomes

1. Students will plan developmentally appropriate math activities for young children.
2. Students will plan adaptations to math activities for children with diverse abilities.
3. Students will demonstrate understanding of recent research in methods of teaching mathematics.
4. Students will demonstrate understanding of early childhood theories as they relate to the teaching of mathematics.
5. Students will demonstrate understanding of unique needs of children from diverse economic or cultural backgrounds.

## EDUC 1185. Introduction to Secondary Education and Youth

### 3 Credits (3)

Introductory course for students considering a career in secondary education. Includes historical, philosophical, and sociological foundations, program organization, critical dispositions, and understanding the context of schools and youth. Practicum required.

Restricted to: Secondary Ed majors. Traditional Grading with RR.

### Learning Outcomes

1. Articulate the attributes of an education professional entering the field.
2. Differentiate and summarize the major educational philosophies and historical events that have influenced the progression of educational practice.
3. Describe the role of law in education with emphasis on the rights and responsibilities of teachers and learners.
4. Develop a preliminary personal philosophy of teaching and learning.
5. Discuss the characteristics and roles of the teacher, the student, and the school in today's education.
6. Identify effective teaching methods, instructional strategies and learning styles.
7. Evaluate the Lesson Planning Process using various lesson planning templates, formats, and rubrics.
8. Explain classroom management techniques.
9. Identify different types of diversity in the classroom environment, particularly in high-needs schools. 1
10. Describe how learning differences are manifested in schools, particularly in high-needs schools. 1
11. Describe how teachers use multiple methods of assessment to engage learners in their own growth, to monitor learner progress. 1
12. Describe how teachers use multiple methods of assessment to modify instruction and inform decision making. 1
13. Identify the role of Standards and High Stakes Testing in the life of an educational professional. 1

14. Complete 24 hours internship in a classroom, preferably a bilingual classroom in a high-needs school. 1
15. Document and reflect on your observations throughout your internship. 1
16. Construct an individualized map to teacher licensure in the State of New Mexico.

**EDUC 1995. Field Experience I****1 Credit (1)**

Introduction to public school teaching, school visits, classroom observations and discussion seminar. May be repeated up to 1 credit.

**Learning Outcomes**

1. Demonstrate an understanding of personal attitudes and motivations for entering the field of education.
2. Identify effective teaching strategies that enhance student learning outcomes.
3. Identify classroom management techniques and learning styles.
4. Develop observational skills and reflective thinking skills.
5. Evaluate instructional methods that enhance upper level thinking skills in children.

**EDUC 1996. Special Topics in Education****1 Credit (1)**

Supervised study in a specific area of interest. Each course shall be designated by a qualifying subtitle. May be repeated up to 9 credits.

**Learning Outcomes**

1. Varies

**EDUC 1998. Internship I****3 Credits (3)**

Supervised experience in elementary education settings. May be repeated up to 3 credits.

**Learning Outcomes**

1. Varies

**EDUC 2710. Pre-Teacher Preparation****3 Credits (3)**

Assists students in developing the necessary competencies needed for acceptance to the Teacher Education Program. Course content includes basic skill development, test taking skills, and completion of teacher preparation packet. May be repeated up to 6 credits.

**Learning Outcomes**

1. Investigate the process and requirements of the Teacher Education Program
2. Read critically about teacher's experiences and write brief reactions
3. Discuss philosophies of education and draft a written personal philosophy of education
4. Discuss the nature of education for students with diverse languages, cultures and abilities
5. Draft personal position statements concerning education for students with disabilities and diverse cultures

**EDUC 2998. Internship II****3 Credits (3)**

Supervised experience in junior high settings. May be repeated up to 3 credits.

**Prerequisite:** must be a co-op student.

**Learning Outcomes**

1. Varies

**EDUC 3110V. Multicultural Issues in Society****3 Credits (3)**

Conceptual manifestations of culture, race, ethnicity, class, gender, exceptionalities, language, and bilingualism within and across society. May be repeated up to 3 credits.

**Learning Outcomes**

1. Understand what is meant by "multicultural education" and respond to the issues and challenges involved as learners, educators, and education stakeholders;
2. Reflect on definitions of power and privilege, critique understandings of difference, and examine the multi-faceted ways in which multicultural education can be enacted in pedagogy, curriculum, and educational organizations;
3. Examine the intersections between race, class, gender, sexuality, language, and citizenship status and try to assess their impact on teaching and learning;
4. Evaluate their own identities, biases, and position in the curricula and schooling experience.

**EDUC 3120. Multicultural Education****3 Credits (2+2P)**

The conceptual manifestations of culture, race and ethnicity, class, gender, sexual orientation, exceptionalities, language, bilingualism, and global citizenship within the schooling process. May be repeated up to 3 credits.

**Learning Outcomes**

1. Understand what is meant by "multicultural education" and respond to the issues and challenges involved as learners, educators, and education stakeholders;
2. Reflect on definitions of power and privilege, critique understandings of difference, and examine the multi-faceted ways in which multicultural education can be enacted in pedagogy, curriculum, and educational organizations;
3. Examine the intersections between race, class, gender, sexuality, language, and citizenship status and try to assess their impact on teaching and learning;
4. Evaluate their own identities, biases, and position in the curricula and schooling experience.

**EDUC 3210. Sheltered English Instruction for the ESL Classroom****3 Credits (3)**

Addresses the acquisition of English proficiency by speakers of other languages. May be repeated up to 3 credits.

**EDUC 3220. Language, Literacy, and Culture in the ESL Classrooms****3 Credits (3)**

Framework and strategies for developing the written abilities of second language learners. May be repeated up to 3 credits.

**EDUC 3996. Special Topics in Education****1-3 Credits (1-3)**

Offered under various subtitles in the Schedule of Classes. May be taken for a maximum of 3 cr. per semester and a total of 6 credits overall. May be repeated up to 6 credits.

**Learning Outcomes**

1. Engage in the study of a specific education topic.

**EDUC 3997. Secondary Field Experience****3 Credits (2+2P)**

Develop professional skills, dispositions, and understanding of secondary bilingual youth, content, and pedagogy through discussion seminar and interactions with public education mentor teachers. Focused

observations, study of classroom language and culture, introduction to lesson planning and student assessment. Requires 32 hours of practicum field experience. Taught with: BLED 3110. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Understand and implement effective practices in secondary education.

#### **EDUC 4310. Methods of Teaching Elementary School Science 3 Credits (2+2P)**

Methods and materials for teaching elementary school science. Includes components of lessons and the use of multimedia. Students must complete 9 hours of science from biology, chemistry, physics, and earth sciences, with no more than 3 hours from any one department. Restricted to: TEP-EED majors. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Create, teach, and assess research based, hands-on, elementary science lessons;
2. Create, teach, and assess research based, hands-on, elementary science lessons that meet the diverse needs of all learners in all aspects of science instruction;
3. Develop assessment tools to evaluate learner's science knowledge;
4. Identify and use appropriate NMSTEM Ready!State science standards for lesson planning;
5. Integrate science with all subjects;
6. Discuss the advantages and the importance of membership in national/international professional organizations(e.g. NSTA) as well as subscribing to professional journals;
7. Identify science educational resources available using a variety of technological tools to enhance learning;
8. Demonstrate competence and confidence in teaching science;
9. Demonstrate basic classroom management skills.

#### **EDUC 4320. Methods of Teaching Elementary School Mathematics 3 Credits (3)**

Content, theories of cognition, and instructional approaches for the teaching of mathematics in the elementary grades.

**Prerequisite:** MATH 1134.

#### **Learning Outcomes**

1. Identify what makes a 'good mathematical task', and how a good task can support students' learning;
2. Understand how children make sense of key mathematics concepts;
3. Understand how tools (including manipulatives, calculators, and other technology) assist children in their thinking and problem solving;
4. Identify your role as a teacher in a math classroom;
5. Practice teaching elementary mathematics activities using a constructivist approach and reflect upon your teaching;
6. Adjust lessons and instruction based on students' needs;
7. Develop a stance of inquiry, explore habits of mind, examine and your own mathematical knowledge and develop the mathematical knowledge needed for effective teaching;
8. Experience mathematics through thinking, reasoning, discourse/communicating, and developing math ideas with understanding so that as teachers you can facilitate learning as you work with students in this process;
9. Begin to develop your knowledge and skills to effectively support ALL learners; in particular students with special needs and bilingual/English Language Learners in mathematics

#### **EDUC 4330. Methods of Teaching Elementary School Social Studies 3 Credits (2+2P)**

Focus on social studies curriculum and instruction including student-centered approaches, active learning, educational technology, nontextual curriculum, integration, multicultural education, authentic assessment, and practical applications. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Understanding of equity and social justice through Social Studies education;
2. Navigating the public-schools and how to integrate Social Studies lessons;
3. Lesson planning and delivering Social Studies instruction;
4. How to evaluate information found online for quality and truth; and
5. Critiquing instructional materials and resources.

#### **EDUC 4410. Teaching Science at the Middle and High School Level 3 Credits (2+2P)**

Integrating content knowledge and pedagogy for the middle and high school teacher in science. The focus will be on a variety of instructional strategies and pedagogical skills that will enhance the learning of science for students in grades 6-12. Practicum required. Taught with EDUC 5410.

May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Understand and implement effective practices for teaching and learning in the secondary science classroom.

#### **EDUC 4420. Teaching Mathematics at the Middle and High School Level 3 Credits (2+2P)**

Integrating content knowledge and pedagogy for the middle and high school teacher in mathematics. The focus will be on a variety of instructional strategies and pedagogical skills that will enhance the learning of mathematics. Practicum required. Taught with EDUC 5420.

May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Understand and implement effective practices for teaching and learning in the secondary mathematics classroom.

#### **EDUC 4430. Teaching Social Studies at the Middle and High School Level 3 Credits (2+2P)**

Integrating content knowledge and pedagogy for the middle and high school teacher in social studies. The focus will be on a variety of instructional strategies and pedagogical skills that will enhance the learning of social studies. Practicum required. Taught with EDUC 5430.

May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Understand and implement effective practices for teaching and learning in the secondary social studies classroom.

#### **EDUC 4440. Teaching Language Arts at the Middle and High School Level 3 Credits (2+2P)**

Implications of cognition and language development for appropriate secondary instructional practices. Focus on construction of meaning, student-centered response to literature, writing process, print and oral language development, based on socio-psycholinguistic research and theory. Practicum required. Taught with EDUC 5440. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Students will evaluate ELA and SS resources and synthesize important domains of education, including history, seminal texts, current events/trends, and formative learning theories such as global learning.

- Students will summarize classroom literacy, language, and culture of ELA/SS classrooms.
- Students will identify authentic assessment and effective instructional strategies and materials that can be used to deliver engaging lessons in ELA/SS reading, writing, and literature study.
- Students will justify their personal teaching philosophy in relation to the study of the history of ELA/SS education, literacy learning theories, teaching pedagogy, and field experiences.
- Students will assemble a professional, culminating reflective portfolio that demonstrates the ability to self-assess strengths and needs based on the NM-Teach standards.

#### **EDUC 4510. Data Literacy and Assessment**

##### **3 Credits (3)**

Methods for selecting, constructing, and using multiple methods of assessment to monitor learner progress and improve student learning. Students will learn to analyze and use classroom and standardized assessment data to understand patterns and gaps in learning, to guide planning and instruction, and employ technology to support practice. May be repeated up to 6 credits.

##### **Learning Outcomes**

- Understand and implement effective data literacy and assessment procedures.

#### **EDUC 4520. Contemporary Issues in Education**

##### **3 Credits (2+2P)**

Discussion of contemporary issues including: classroom management, motivation, conferences, professional organizations, professional ethics, community influences, cultural pluralism, reform movements, instructional influences, and educational technology. Requires field experience component in a school or community setting. May be repeated up to 3 credits.

##### **Learning Outcomes**

- Understand important issues and practices in contemporary education.

#### **EDUC 4530. Science for Educators**

##### **3 Credits (3)**

This course will focus on the exploration of key central science concepts and how to connect learners to resources, tools of inquiry, and collaborative problem solving related to authentic local and global issues in classroom, lab, and digital science environments. Topics include: The nature of science, Physical Science, Life Science, Earth and Space Science.

##### **Learning Outcomes**

- Understand primary science content and knowledge for K-12 classrooms.

#### **EDUC 4540. Teaching History**

##### **3 Credits (3)**

Philosophical and practical issues of teaching history and social studies are explored. Designed to help prospective teachers at all levels clarify their views about studying history and social studies. A variety of pedagogical strategies for teaching history and social studies are explored. This course offers a review of the New Mexico Social Studies Standards for teaching.

##### **Learning Outcomes**

- Rethink and teach students to rethink history through multiple perspectives.
- Utilize Bloom's Taxonomy and level of questioning.
- Build essential questioning versus comprehensive questioning.

- Utilize Webb's Depth of Knowledge.
- Develop strong objectives for teaching and learning.
- Initiate discussion in a classroom setting.
- Build a Google classroom.
- Create unit-based assigned on a topic in history (lesson and assessment development).
- Utilize web resources that will include Open Education Resources or OER's.
- Appraise the NM standards for Social Studies to develop lessons that actualize the standards.

#### **EDUC 4810. Elementary Student Teaching**

##### **9 Credits (9)**

Synthesis of knowledge and skills appropriate to teaching in elementary schools. May be repeated up to 9 credits.

##### **Learning Outcomes**

- Synthesis of knowledge and skills appropriate to teaching in PreK - 3rd grade educational settings.

#### **EDUC 4811. Elementary Student Teaching Seminar**

##### **3 Credits (3)**

Discussion of elementary school issues related to student teaching. Taken concurrently with EDUC 4810. May be repeated up to 3 credits.

##### **Learning Outcomes**

- Candidates demonstrate an understanding of the critical concepts and principles in their discipline and of the pedagogical content knowledge necessary to engage students' learning of concepts and principles in the discipline;
- Candidates create and implement learning experiences that motivate K-8 students, establish a positive learning environment, and support K-8 students' understanding of the central concepts and principles in the content discipline;
- Candidates design, adapt, and select a variety of valid and reliable assessments and employ analytical skills necessary to inform ongoing planning and instruction, as well as to understand, and help students understand their own, progress and growth;
- Candidates engage students in reasoning and collaborative problem solving related authentic local, state, national, and global issues, incorporating new technologies and instructional tools appropriate to such tasks. Candidates use research and evidence to continually evaluate and improve their practice, particularly the effects of their choices and actions on others, and they adapt their teaching to meet the needs of each learner;
- Candidates design and implement appropriate and challenging learning experiences, based on an understanding of how children learn and develop. They ensure inclusive learning environments that encourage and help all K-8 students reach their full potential across a range of learner goals;
- Candidates work with K-8 students and families to create classroom cultures that support individual and collaborative learning and encourage positive social interaction, engagement in learning, and independence;
- Candidates build strong relationships with students, families, colleagues, other professionals, and community members, so that all are communicating effectively and collaborating for student growth, development, and well-being;
- Candidates reflect on their personal biases and access resources that deepen their own understanding of cultural, ethnic, gender, sexual



orientation, language, and learning differences to build stronger relationships and to adapt practice to meet the needs of each learner.

### **EDUC 4820. Secondary Student Teaching**

**9 Credits (9)**

Synthesis of knowledge and skills appropriate to teaching in secondary schools. May be repeated up to 9 credits.

#### **Learning Outcomes**

1. Carry out effective student teaching in a secondary classroom.

### **EDUC 4821. Middle and High School Student Teaching Seminar**

**3 Credits (3)**

Discussion of secondary school issues related to student teaching. Taken concurrently with EDUC 4820. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Carry out effective student teaching in a secondary classroom.

### **EDUC 4992. Directed Study Courses in Education**

**1-3 Credits (1-3)**

Each course shall be identified by a qualifying subtitle. Maximum of 3 credits in any one semester and a grand total of 6 credits. May be repeated up to 6 credits.

#### **Learning Outcomes**

1. Engage in the study of a specific education topic.

### **EDUC 4996. Topics**

**1-3 Credits (1-3)**

Offered under various subtitles which indicate the subject matter to be covered. A maximum of 3 credits in any one semester and a grand total of 3 credits. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Engage in the study of a specific education topic.

### **EDUC 5110. Exploration in Education**

**3 Credits (3+3P)**

Overview of elementary and secondary schooling. Includes opportunities to gain teaching experience in diverse settings.

#### **Learning Outcomes**

1. Explore important concepts and knowledge necessary to carry out effective practices in K-12 classroom settings.

### **EDUC 5120. Multicultural Education**

**3 Credits (2+2P)**

Conceptual manifestations of culture, race, and ethnicity, class, gender, exceptionalities, language and bilingualism within the schooling process. Taught with EDUC 3120 with differentiated assignments for graduate students. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Analyze the influence on learning of such social identities as race, class, sexual orientation, language, and gender.
2. Deconstruct tacit knowledges about learners and the learning process.
3. Distinguish among the structural and discursive forces that hamper particular students' educational attainment.
4. Evaluate one's own personal response to oppression in educational settings.
5. Support a pedagogical perspective and school level strategies targeted towards a more just and equitable education in your classroom.

### **EDUC 5130. Technology and Pedagogy**

**3 Credits (3)**

Critical analysis, design, and evaluation of computer-based technologies in teaching and learning for diverse communities. Students must be in Graduate standing. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Understand the relationship between curriculum and pedagogy.

### **EDUC 5140. Research in Curriculum and Pedagogy**

**3 Credits (3)**

An introduction to qualitative and quantitative designs for research in curriculum and instruction, with emphasis on action research. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Locate metrics useful for evaluating the quality of published research;
2. Identify the claims and supportive evidence presented in published empirical research;
3. Weigh the evidence presented in published empirical research;
4. Analyze the alignment of methods used in published empirical research with associated frameworks and research questions;
5. Synthesize a narrow body of literature in their field of interest.

### **EDUC 5150. Classroom Management**

**3 Credits (3)**

Strategies for managing classroom settings and determining appropriate modification of instructional approaches to meet changing classroom situations. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Understand effective practices in K-12 classroom management.

### **EDUC 5160. Curriculum and Pedagogy**

**3 Credits (3)**

Introduction, reconstruction, and other connections among historical, philosophical, sociocultural, psychological, and theoretical foundations of curriculum and pedagogy and their application to culturally and linguistically diverse teaching and learning settings. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Describe the historical development of standards, curriculum, and assessment in the USA;
2. Critically analyze the major influences on the historical development of standards, curriculum, and assessment;
3. Explain the positive and negative impacts these major influences have had on current standards, curriculum, and assessment;
4. Students will be able to express attainable planned actions to advocate for socially just and equitable systems within their school, district, community, and profession;
5. Construct a coherent pedagogical perspective that draws on the theories and perspectives discussed throughout the course;
6. Create a plan for a lesson that puts into action the curricular and pedagogical perspectives that place value in, and make space for, the diversity of individual social development within and between cultures.

### **EDUC 5170. Action Research Projects**

**3 Credits (3)**

Deeper explorations and connections among foundations of curriculum and pedagogy and their application to culturally and linguistically diverse teaching and learning settings through action research projects, approaches to assessment, and agency. May be repeated up to 3 credits.

**Learning Outcomes**

1. Understanding of Action Research
2. Develop an Action Research plan: Question Development; Data collection plan; Analysis
3. Analysis to Action for teaching: Applying data results to planning; Decision-making for changes in teaching
4. Presentation of Research: Research writing process

**EDUC 5210. Sheltered English Instruction for the ESL Classroom  
3 Credits (3)**

Addresses the acquisition of English proficiency via the SIOP (Sheltered Instruction Observational Protocol) a research validated model for lesson planning and implementation that provides English learners with access to grade-level standards.

**EDUC 5220. Language, Literacy and Culture in the ESL Classrooms  
3 Credits (3)**

Framework and strategies for developing the written abilities of second language learners. Explore different theories of language, culture and literacy by analyzing the interconnections between language, culture and literacy.

**EDUC 5310. Methods of Teaching Elementary School Science  
3 Credits (2+2P)**

Methods and materials for teaching elementary school science. Includes components of lessons, planning and teaching lessons in schools, and multimedia. Students should have 9 hours of science from biology, chemistry, physics, and earth science with no more than 3 hours from any one department to enroll in this course. Taught with EDUC 4310 with differentiated assignments for graduate students. May be repeated up to 3 credits.

**Corequisite:** ECED 5810; EDUC 5320; READ 5310.

**Learning Outcomes**

1. Create, teach, and assess research based, hands-on, elementary science lessons;
2. Create, teach, and assess research based, hands-on, elementary science lessons that meet the diverse needs of all learners in all aspects of science instruction;
3. Develop assessment tools to evaluate learner's science knowledge;
4. Identify and use appropriate NMSTEM Ready!State science standards for lesson planning;
5. Integrate science with all subjects;
6. Discuss the advantages and the importance of membership in national/international professional organizations(e.g. NSTA) as well as subscribing to professional journals;
7. Identify science educational resources available using a variety of technological tools to enhance learning;
8. Demonstrate competence and confidence in teaching science;
9. Demonstrate basic classroom management skills.

**EDUC 5320. Methods of Teaching Elementary School Mathematics  
3 Credits (2+2P)**

Content, theories of cognition, and instructional approaches for the teaching of mathematics in the elementary grades. Taught with EDUC 4320 with differentiated assignments for graduate students. May be repeated up to 3 credits.

**Prerequisite:** MATH 1134.

**Corequisite:** ECED 5810; EDUC 5310; READ 5310.

**Learning Outcomes**

1. Identify what makes a 'good mathematical task', and how a good task can support students' learning;

2. Understand how children make sense of key mathematics concepts;
3. Understand how tools (including manipulatives, calculators, and other technology) assist children in their thinking and problem solving;
4. Identify your role as a teacher in a math classroom;
5. Practice teaching elementary mathematics activities using a constructivist approach and reflect upon your teaching;
6. Adjust lessons and instruction based on students' needs;
7. Develop a stance of inquiry, explore habits of mind, examine and your own mathematical knowledge and develop the mathematical knowledge needed for effective teaching;
8. Experience mathematics through thinking, reasoning, discourse/communicating, and developing math ideas with understanding so that as teachers you can facilitate learning as you work with students in this process;
9. Begin to develop your knowledge and skills to effectively support ALL learners; in particular students with special needs and bilingual/English Language Learners in mathematics

**EDUC 5330. Methods of Teaching Elementary School Social Studies  
3 Credits (2+2P)**

Focus on social studies curriculum and instruction including student-centered approaches, active learning, educational technology, nontextual curriculum, integration, multicultural education, authentic assessment, and practical applications. Taught with EDUC 4330 with differentiated assignments for graduate students. May be repeated up to 3 credits.

**Corequisite:** READ 5320.

**Learning Outcomes**

1. Understanding of equity and social justice through Social Studies education;
2. Navigating the public-schools and how to integrate Social Studies lessons;
3. Lesson planning and delivering Social Studies instruction;
4. How to evaluate information found online for quality and truth; and
5. Critiquing instructional materials and resources.

**EDUC 5410. Teaching Science at the Middle and High School Level  
3 Credits (2+2P)**

Integrating content knowledge and pedagogy for the middle and high school teacher in science. The focus will be on a variety of instructional strategies and pedagogical skills that will enhance the learning of science for student in grades 6-12. Practicum required. Same as EDUC 463 with differentiated assignments for graduate students. TEP required May be repeated up to 3 credits.

**Prerequisite:** EDUC 5120 & EDUC 5110.

**Learning Outcomes**

1. Understand and implement effective practices for teaching and learning in the secondary science classroom.

**EDUC 5420. Teaching Mathematics at the Middle and High School Level  
3 Credits (2+2P)**

Integrating content knowledge and pedagogy for the middle and high school teacher in mathematics. The focus will be on a variety of instructional strategies and pedagogical skills that will enhance the learning of students in 6-12 setting settings for mathematics. Same as EDUC 4420 with differentiated assignments for graduate students. TEP required May be repeated up to 3 credits.

**Prerequisite:** EDUC 5120 & EDUC 5110.

**Learning Outcomes**

1. Understand and implement effective practices for teaching and learning in the secondary mathematics classroom.

**EDUC 5430. Teaching Social Studies at the Middle and High School Level  
3 Credits (2+2P)**

Integrating content knowledge and pedagogy for the middle and high school teacher in social studies. The focus will be on a variety of instructional strategies and pedagogical skills that will enhance the learning of social studies for student in grades 6-12. Practicum required. Same as EDUC 4430 with differentiated assignments for graduate students. TEP required May be repeated up to 3 credits.

**Prerequisite:** EDUC 5120 & EDUC 5110.

**Learning Outcomes**

1. Understand and implement effective practices for teaching and learning in the secondary social studies classroom.

**EDUC 5440. Teaching Language Arts at the Middle and High School Level  
3 Credits (2+2P)**

Implications of cognition and language development for appropriate secondary instructional practices. Focus on construction of meaning, student-centered response to literature, writing process, print and oral language development, based on socio-psycholinguistic research and theory. Practicum required. Same as EDUC 4440 with differentiated assignments for graduate students. TEP required. May be repeated up to 3 credits.

**Prerequisite:** EDUC 5120 & EDUC 5110.

**Learning Outcomes**

1. Students will evaluate ELA and SS resources and synthesize important domains of education, including history, seminal texts, current events/trends, and formative learning theories such as global learning.
2. Students will summarize classroom literacy, language, and culture of ELA/SS classrooms.
3. Students will identify authentic assessment and effective instructional strategies and materials that can be used to deliver engaging lessons in ELA/SS reading, writing, and literature study.
4. Students will justify their personal teaching philosophy in relation to the study of the history of ELA/SS education, literacy learning theories, teaching pedagogy, and field experiences.
5. Students will assemble a professional, culminating reflective portfolio that demonstrates the ability to self-assess strengths and needs based on the NM-Teach standards.

**EDUC 5510. Elementary Science Development  
3 Credits (3)**

Understanding of the research on elementary development of science and its application in the classroom. Focus on how elementary students come to understand topics in the physical sciences, life sciences, and earth and space sciences. Includes applications to engineering and technology. Course assignments require working with elementary students. Consent of Instructor required. Restricted to: Master of Arts in Education: Elementary Mathematics and Science majors.

**Learning Outcomes**

1. To put current research on elementary students' development of science into practice.
2. To analyze student thinking to construct models of cognitive structures.
3. To select, sequence, and administer tasks to test models of students' cognitive structures.

4. To develop and facilitate a classroom lesson plan to build on models of students' cognitive structures.
5. To reflect on observations of student learning in relation to current research on elementary students' development of science.

**EDUC 5520. Elementary Mathematics Development I  
3 Credits (3)**

Understanding of the research on elementary development of mathematics and its application in the classroom. Focus on how elementary students come to understand counting, the base 10 number system, and connections between early number understanding, geometric representations, fractions, and operations in later grades. Course assignments require working with elementary students. Consent of Instructor required. Restricted to: Master of Arts in Education: Elementary Mathematics and Science majors.

**Learning Outcomes**

1. To put current research on elementary students' development of mathematics into practice.
2. To analyze student thinking to construct models of cognitive structures.
3. To select, sequence, and administer tasks to test models of students' cognitive structures.
4. To develop and facilitate a classroom lesson plan to build on models of students' cognitive structures.
5. To reflect on observations of student learning in relation to current research on elementary students' development of mathematics.

**EDUC 5530. Elementary Mathematics Development 2  
3 Credits (3)**

Understanding of the research on elementary development of mathematics and its application in the classroom. Focus on how elementary students develop multiplicative reasoning from a foundation of additive reasoning, connections to geometric representations, and how multiplicative reasoning supports development of understanding of fractions, ratios, and rate—which leads to proportional reasoning. Course assignments require working with elementary students. Consent of Instructor required. Restricted to: Master of Arts in Education: Elementary Mathematics and Science majors.

**Learning Outcomes**

1. To put current research on elementary students' development of science into practice.
2. To analyze student thinking to construct models of cognitive structures.
3. To select, sequence, and administer tasks to test models of students' cognitive structures.
4. To develop and facilitate a classroom lesson plan to build on models of students' cognitive structures.
5. To reflect on observations of student learning in relation to current research on elementary students' development of science.

**EDUC 5540. Leadership Advocacy in Elementary Mathematics and Science  
3 Credits (3)**

This course focuses on development of elementary mathematics and science specialists' leadership qualities necessary to promote and advocate for positive change through active participation with other professionals and in their own professional growth that draws upon current research in their respective fields, development of professional development programs, evaluation of educational structures that impact equitable access to high quality instruction, and communication with stakeholders directly and indirectly associated with education

institutions. Consent of Instructor required. Restricted to: Master of Arts in Education: Elementary Mathematics and Science majors.

#### **Learning Outcomes**

1. To leverage current research on elementary students' development of mathematics science to enact change in teaching practice and education policy.
2. To make use of leadership skills to facilitate discussion with education stakeholders, school and district administrators, and teaching professionals.
3. To make use of leadership skills to collaborate with education stakeholders, school and district administrators, and teaching professionals.
4. To examine current mathematics and science teaching practice within a school or district and create a professional development plan that aligns with current research on best practices.
5. To examine current mathematics and science teaching practice within a school or district and create a professional development plan that aligns with district and/or school mission and vision.

#### **EDUC 5810. Student Teaching**

##### **6 Credits (6)**

Integrated with EDUC 5811. Student is assigned to an elementary or secondary classroom for 14-16 weeks. Elementary or secondary.

**Corequisite:** EDUC 5811.

#### **Learning Outcomes**

1. The teacher candidate seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.
2. The teacher candidate uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
3. The teacher candidate works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
4. The teacher candidate understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
5. The teacher candidate understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
6. The teacher candidate understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues
7. The teacher candidate understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
8. The teacher candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

9. The teacher candidate understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways. 1
10. The teacher candidate engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

#### **EDUC 5811. Teaching Methods Laboratory**

##### **3 Credits (3)**

Practical application of previously learned content. Students must have a Bachelors degree and admission to the Graduate School and departmental special program. May be repeated up to 3 credits.

#### **Learning Outcomes**

1. Candidates demonstrate an understanding of the critical concepts and principles in their discipline and of the pedagogical content knowledge necessary to engage students' learning of concepts and principles in the discipline;
2. Candidates create and implement learning experiences that motivate K-8 students, establish a positive learning environment, and support K-8 students' understanding of the central concepts and principles in the content discipline;
3. Candidates design, adapt, and select a variety of valid and reliable assessments and employ analytical skills necessary to inform ongoing planning and instruction, as well as to understand, and help students understand their own, progress and growth;
4. Candidates engage students in reasoning and collaborative problem solving related authentic local, state, national, and global issues, incorporating new technologies and instructional tools appropriate to such tasks. Candidates use research and evidence to continually evaluate and improve their practice, particularly the effects of their choices and actions on others, and they adapt their teaching to meet the needs of each learner;
5. Candidates design and implement appropriate and challenging learning experiences, based on an understanding of how children learn and develop. They ensure inclusive learning environments that encourage and help all K-8 students reach their full potential across a range of learner goals;
6. Candidates work with K-8 students and families to create classroom cultures that support individual and collaborative learning and encourage positive social interaction, engagement in learning, and independence;
7. Candidates build strong relationships with students, families, colleagues, other professionals, and community members, so that all are communicating effectively and collaborating for student growth, development, and well-being;
8. Candidates reflect on their personal biases and access resources that deepen their own understanding of cultural, ethnic, gender, sexual orientation, language, and learning differences to build stronger relationships and to adapt practice to meet the needs of each learner.

#### **EDUC 5990. Master's Thesis**

##### **1-6 Credits (1-6)**

Thesis. A minimum of four credits and a maximum of six credits (thesis hours) can be counted toward the MA degree. The thesis hours require the permission of the course instructor. May be repeated up to 15 credits. May be repeated up to 15 credits.



**Learning Outcomes**

1. Graduate students at the Master of Arts level pursuing a research focus degree learn how to prepare for basic research study.
2. Graduate students at the Master of Arts level pursuing a research focus degree learn how to submit IRB for a research study.
3. Graduate students at the Master of Arts level pursuing a research focus degree learn how to conduct a comprehensive study.
4. Graduate students at the Master of Arts level pursuing a research focus degree learn how to summarize the research and write the results in a thesis.
5. Graduate students at the Master of Arts level pursuing a research focus degree learn how to present results from research and defend the results.

**EDUC 5991. Special Research Programs****1-3 Credits (1-3)**

Individual investigations either analytical or experimental. Maximum of 3 credits per semester and a total of 6 credits overall. May be repeated up to 6 credits.

**Learning Outcomes**

1. Engage in a specific research topic.

**EDUC 5992. Directed Study Courses in Education****1-3 Credits (1-3)**

Each course will be identified by a qualifying subtitle. Maximum of 3 credits in any one semester and a total of 6 credits overall. May be repeated up to 6 credits.

**Learning Outcomes**

1. Engage in a specific education topic.

**EDUC 5996. Special Topics****1-3 Credits (1-3)**

Course subtitled in the Schedule of Classes. A maximum of 3 credits per semester and a total of 6 credits overall. May be repeated up to 6 credits.

**Learning Outcomes**

1. Engage in the study of a specific education topic.

**EDUC 5997. Capstone Research Project****1-3 Credits (1-3)**

Capstone project. Maximum of 3 credits per semester and a total of 6 credits overall. Consent of Instructor required. Restricted to: Admittance into the Master of Arts in Education: Elementary Mathematics and Science program.

**Learning Outcomes**

1. To investigate a problem or issue in education.
2. To communicate results of the investigation in a scholarly manner.

**EDUC 5998. Social Studies/Language Arts Methods Internship****3 Credits (3)**

Elementary alternative licensure process course designed to introduce intern licensed teachers to methods of instruction of social studies and language arts. University supervision provided simultaneously with EDUC 5998. Restricted to CI and HSS non-degree students. May be repeated up to 3 credits.

**Learning Outcomes**

1. Carry out a successful internship in social studies and language arts teaching methods.

**EDUC 6110. Curriculum for a Diverse Society****3 Credits (3)**

Builds upon knowledge of the foundations of curriculum and professional experience in an educational setting. Focus on the role of the curriculum

leader in understanding curriculum theory, designing curriculum, and implementing curriculum in various settings. May be repeated up to 3 credits.

**Learning Outcomes**

1. Reflect on the significance of the teachers' professional role in schools;
2. Analyze the notion of curriculum in a broader sense along with the concepts of culture and diversity;
3. Develop understanding of the fundamental theoretical constructs in organizing the way we interact and live in our society;
4. Assume the commitment to challenge the taken for granted assumptions that have led schools to be places where inequities have been perpetuated;
5. Take on the challenge of transforming schools into public social spheres where hope is promoted, looked for, and risks are taken and faced.

**EDUC 6120. Pedagogy of Learning in a Diverse Society****3 Credits (3)**

Builds upon knowledge of the foundations of instruction and professional experience in teaching and learning. Focus on diverse theories of instruction with relevant practices in pluralistic settings and multicultural interactions of teaching and learning. May be repeated up to 3 credits.

**Learning Outcomes**

1. Instill a personal discipline that will establish clarity into your plan of studies to operationalize the direction of your research project;
2. Develop a deeper and thicker knowledge base, language facility, and chronological understanding that impact contemporary theoretical/philosophical paradigms;
3. Create a critical reflection on many of the contemporary issues/findings of recent brain research, its implications for pedagogy and andragogy and central to teaching and learning;
4. Articulate several of the diverse historical forces that legitimate certain teaching and learning practices, theories/issues in contemporary schooling life, and delegitimize other theories/issues just as easily;
5. Create a sense of collegiality and community with your seminar colleagues inside and outside of this course

**EDUC 6210. Curricular Mediation for Democratic Communities****3 Credits (3)**

Problematicization of the various relationships, roles, and leadership considerations which emerge within educational institutions, their structures, and their culturally democratic practices in the classroom, community, and society. Restricted to doctoral-level students of any major. Same as BLED 6210. May be repeated up to 3 credits.

**EDUC 6220. Praxis and Reflexivity****3 Credits (3)**

The cyclical research processes of continuous self and systemic (re)evaluation vis-a-vis classroom, community, and society with an eye toward reflection, growth, change, and larger forms of social agency. Restricted to doctoral-level students of any major. Same as BLED 6220, READ 6220. May be repeated up to 3 credits.

**Learning Outcomes**

1. Students develop a more sound understanding of their research agenda.
2. Students will gain a better understanding of research in society, generally, and in education, specifically.
3. Students will work as a community of learners that struggles to understand our influence on educational policy and practice.

- Students will synthesize reading material and create discussion opportunities for the entire class.
- Students will complete writing assignments the social, ethical, legal, and human issues surrounding the use of technology uses, data literacy, and PreK-12 schools and apply that knowledge into future research.

**EDUC 6230. Research in Praxis: Qualitative Research II**  
**3 Credits (3)**

This course offers a more in-depth view of research and research paradigms, theories, methods, approaches, and tools and is a sequential next step beyond Qualitative Research I. Concepts are developed to encourage research from problem formulation to interpretation of results as reflected by students' own scholarly engagements. Course activities can include alternative community-or-school-based research aimed at investigating and transforming educational realities with the participants for their own scholarly growth and development. Students will experience the dynamic between research theory and practice in education.

**Learning Outcomes**

- Develop processes required for research problems within educational settings, design relevant qualitative research strategies.
- Examine research problems, determine relevant sources, practice data collection/analysis methods, and assess the results of such efforts.

**EDUC 6310. Critical Theory and Pedagogy**  
**3 Credits (3)**

Covers the various schools of thought on pedagogy, the historical and philosophical foundations embedded in these schools, and their impact on educational settings. Restricted to doctoral-level students of any major. Same as BLED 6310. May be repeated up to 3 credits.

**EDUC 6320. Social Justice Issues in Education**  
**3 Credits (3)**

Covers the systems of oppression located within the constructs of power and hegemony and their impact on schooling. Restricted to doctoral-level students of any major. Same as BLED 6320. May be repeated up to 3 credits.

**EDUC 6330. Critical Race Theory & Storytelling in Educational Spaces**  
**3 Credits (3)**

An upper-level doctoral course focusing on the philosophical, theoretical, and methodological origins and practices of CRT and the sister frameworks that emerged from CRT, i.e., AsianCrit, BlackCrit, FemCrit, LatCrit, QueerCrit, TribalCrit, and WhiteCrit within educational spaces. May be repeated up to 3 credits.

**Learning Outcomes**

- Articulate the major tenets and assumptions of critical race theory (CRT);
- Evaluate CRT's usefulness in educational research and what makes a CRT analysis unique or different from other analyses;
- Synthesize research conducted by CRT scholars and the effect of racial injustice on students of color;
- Analyze and disrupt majoritarian narratives (stories) that perpetuate racial injustice in the U.S., with a focus on institutions that intersect with educational systems.

**EDUC 6340. Theoretical Frameworks and Research Design Topics**  
**3 Credits (3)**

This course offers an in-depth view of research and research paradigms, theories, methods, approaches, and tools. This course strives to encourage development of a research paradigm from problem formulation to interpretation of results. May be repeated up to 3 credits.

**Learning Outcomes**

- Identify frameworks of research including affordances and challenges based on research goals.
- Develop concepts related to previous explorations of research paradigms, approaches, methods, and tools reflect on your own research activity.
- Conceptualize the tasks and processes of research problems within educational settings, design relevant research strategies.
- Examine problems via heuristics to consider select pertinent data sources, data collection methods, and data analysis methods.

**EDUC 6410. Current Research in Educational Practice**  
**3 Credits (3)**

A seminar for doctoral and education specialist students emphasizing current research and educational practices. May be repeated up to 3 credits.

**Learning Outcomes**

- Engage in the study of a specific education research topic.

**EDUC 6420. Evaluation of Quantitative Research in Education**  
**3 Credits (3)**

A doctoral-level exploration of a broad range of quantitative research designs and methodologies for collection and analysis of data as applied to critical review of the literature. May be repeated up to 3 credits.

**Learning Outcomes**

- Identify the tasks and processes required to formulate appropriate research problems within educational settings, design relevant qualitative research strategies; for examining such problems, select pertinent data sources, data collection methods, and data analysis methods, and assess the results of such efforts.

**EDUC 6430. Advanced Statistics**  
**3 Credits (3)**

An intermediate course focusing on more advanced theories and techniques of inferential statistics as applied to education and psychology. Includes ANOVA, planned contrasts, ANCOVA, simple regression, and non-parametrics. A computer package will be the primary tool for data analysis.

**Prerequisite:** EDUC 6420 or equivalent course work.

**Learning Outcomes**

- Demonstrates knowledge of and uses theories, approaches, methods, and techniques for research in education.
- Demonstrates knowledge of and applies research techniques appropriate to a research problem.

**EDUC 6440. Qualitative Research I**  
**3 Credits (3)**

This course offers an examination of qualitative research approaches used in educational and social settings, with a focus upon research design, field relations, data collection and analysis, and writing from a qualitative perspective. May be repeated up to 3 credits.

**Learning Outcomes**

- Identify the tasks and processes required to formulate appropriate research problems within educational settings, design relevant qualitative research strategies; for examining such problems, select pertinent data sources, data collection methods, and data analysis methods, and assess the results of such efforts.

**EDUC 6910. Dissertation Seminar**  
**3 Credits (3)**

Dissertation seminar course for doctoral students utilizing a qualitative research design. May be repeated up to 3 credits.

**Learning Outcomes**

1. To investigate a problem or issue in education.
2. Prepare the first three chapters of a dissertation.

**EDUC 6990. Practicum****2-6 Credits (2-6)**

Provision for field inquiries and experiences designed to prepare the doctoral student for assuming responsibilities in the areas of curriculum and instruction. Students must be in post-master's standing. May be repeated up to 6 credits.

**Learning Outcomes**

1. Plan course of study with with faculty advisor or instructor.
2. Set practicum expectations for semester.

**EDUC 6991. Doctoral Research****1-15 Credits (1-15)**

Research. May be repeated up to 88 credits.

**Learning Outcomes**

1. Engage in a specific research topic.

**EDUC 6996. Selected Topics****1-6 Credits (1-6)**

Offered under various subtitles which indicate the subject matter to be covered. A maximum of 6 credits per semester and a total of 6 credits overall. May be repeated up to 6 credits.

**Learning Outcomes**

1. Engage in the study of an ECED topic.

**EDUC 6997. Independent Study Topics****1-3 Credits (1-3)**

A problem and seminar course for those pursuing an advanced graduate degree. Course subtitled in the Schedule of Classes. May be repeated up to 99 credits.

**Learning Outcomes**

1. Plan course of study with with faculty advisor or instructor
2. Set course expectations.

**EDUC 6998. Internship in Curriculum and Instruction****3-6 Credits (3-6)**

For those pursuing an advanced graduate degree to meet the requirement for field work. Each course to bear an appropriate subtitle. May be repeated up to 6 credits.

**Learning Outcomes**

1. Complete an educational internship.

**EDUC 6999. Ed.S. Thesis****1-15 Credits (1-15)**

Offered primarily for those pursuing the research requirements for the Ed.S. degree. Course may be repeated up to a maximum allowed for this degree. Each research project will be designated by a qualifying subtitle. May be repeated up to 88 credits.

**Learning Outcomes**

1. To investigate a problem or issue in education.
2. Prepare the a complete doctoral project.

**EDUC 7000. Doctoral Dissertation****1-15 Credits (1-15)**

Dissertation. May be repeated up to 88 credits.

**Learning Outcomes**

1. Complete all phases of dissertation.
2. Defend dissertation