

# SCHOOL OF TEACHING, LEARNING AND EDUCATIONAL SCIENCES

Stephanie Hathcock, PhD—Interim School Head

The School of Teaching, Learning and Educational Sciences develops outstanding education professionals and school psychologists who have the confidence and demonstrated competence to be leaders, advocates, and agents of change in regional, national and world communities. We employ and model authentic, engaging methods and innovative, collaborative practices to develop scholars, especially teachers, teacher educators and school psychologists who are transformative leaders and reflective practitioners adept at using creative and effective methods to foster productive and just communities. Programs in the School of Teaching, Learning and Educational Sciences (STLES) include curriculum studies, elementary education, gifted and talented education, secondary education, literacy education, science/mathematics education, special education and school psychology. Consistent with the University's Professional Education unit conceptual framework, all programs leading to teacher certification at both initial and advanced levels incorporate the L.E.A.D.S. framework based on leadership, ethics and professionalism, academic and professional roles, diversity and service orientation/ community outreach. Graduate program goals in STLES focus on the concepts of agency, pedagogy, diversity and research.

## Course Prefixes

Most courses in STLES programs carry the CIED (Curriculum and Instruction) prefix. Other course prefixes include LLCE (Language, Literacy & Culture), SPED (Special Education), SMED (Science/ Mathematics Education), and SPSY (School Psychology).

## Undergraduate Programs

- Jill Metzger, MS—Teaching Instructor and Elementary Education Area Coordinator
- Shanedra Nowell, PhD—Associate Professor and Secondary Education Area Coordinator

The School offers undergraduate degrees in elementary, secondary, and K-12 education. The Bachelor of Science in Elementary Education degree qualifies the student for an Oklahoma elementary teaching certificate (grades 1-8). The program is intended to provide students with:

- a breadth of knowledge reflecting the broad traditions of general education, and
- a depth of knowledge in the area of specialization.

The degree includes four field experiences, culminating in a full-semester clinical internship, through which teacher candidates work in a diverse school setting, while demonstrating and strengthening their pedagogical knowledge. This degree is offered face-to-face in Stillwater and also through the Elementary Education Online program worldwide. The culminating clinical internship placement opportunities include placement in accredited schools in a radius including and outside of Stillwater, with out-of-state placements for online program students and international placements also available. All students complete a Professional Portfolio. Oklahoma certification also mandates the Praxis

Performance Assessment for Teachers (PPAT) (<https://www.ets.org/ppat.html>) and the Certification Examinations for Oklahoma Educators.

The Bachelor of Science in Secondary or K-12 Education degree is designed to prepare teacher candidates who are life-long learners, emerging professionals and subject matter specialists with strong liberal arts backgrounds. Each secondary/K-12 degree and certification program includes general education courses, extensive specialization coursework in the discipline area, and professional education courses accompanied by school-based field experiences. Degree options leading to certification for teaching grades 5-12 are English and social studies. The foreign language option leads to certification in grades K-12. Secondary science and mathematics education students pursue degrees from the College of Arts and Sciences through the OSUTeach program. Students complete a Professional Portfolio. Oklahoma certification also mandates the Praxis Performance Assessment for Teachers (PPAT) (<https://www.ets.org/ppat.html>) and the Certification Examinations for Oklahoma Educators.

## Programs/Areas of Emphasis Degrees

Degrees offered through STLES programs include Bachelor of Science (BS), Master of Science (MS), Education Specialist (EdS), and Doctor of Philosophy (PhD).

### Elementary Education

- Elementary Education—BS, BS Online Option

### Secondary Education

- Secondary Education
  - English—BS
  - Mathematics—BS
  - Science—BS
  - Social Studies—BS

### Teaching, Learning, and Leadership

- College Teaching—GRCT
- Effective Teaching in Secondary Schools—GRCT
- Effective Teaching in the Elementary School—GRCT
- Elementary Mathematics Specialist—GRCT
- STEM—GRCT
- Curriculum and Leadership Studies—MS
- K12 Education—MS
- Math/Science Education—MS
- Reading/Literacy—MS
- Special Education—MS

### EdS in Education

- Education Specialist in Language, Literacy and Culture

### PhD in Education

- Curriculum Studies—MS, PhD
  - College Curriculum and Teaching—PhD
  - Curriculum and Leadership—PhD
  - International and Peace Leadership—PhD
- Language, Literacy, and Culture—PhD
- Mathematics Education—PhD
- Science Education—PhD
- Special Education—PhD

## School Psychology

• School Psychology—EdS, PhD

## Courses

### CIED 1230 Reading and Study Skills for College Students

**Description:** Instruction and laboratory experience for the improvement of reading rate, vocabulary, comprehension, and study skills. Graded on pass-fail basis. Offered for variable credit, 1-4 credit hours, maximum of 4 credit hours.

**Credit hours:** 1-4

**Contact hours:** Lecture: 1-4 Contact: 1-4

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

### CIED 2453 Introduction to Teaching and Learning

**Prerequisites:** Declaration of intention to pursue a program in Professional Education.

**Description:** Overview of teaching and learning in the 21st century so that students understand the foundations of education and basic pedagogy. This course includes the initial pre-professional clinical experience in schools, first through eighth grades. Required for full admission to Professional Education. Previously offered as CIED 2450.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Clinical, Lecture, Lecture Clinical

**Department/School:** Teaching, Learning, Ed Science

### CIED 3005 Foundations of Literacy

**Prerequisites:** ENGL 1113, ENGL 1213, ENGL 2413.

**Description:** Survey of evaluation, selection and utilization of literature of childhood; introduces cognitive and linguistics foundations of literacy; language conventions needed to compose and comprehend oral and written texts. Work in school setting.

**Credit hours:** 5

**Contact hours:** Lecture: 5 Contact: 5

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

### CIED 3133 Children's Literature Across the Curriculum

**Description:** Critical, analytical and instructional skills for teaching with culturally diverse literature for elementary and middle school learners. Integration of literature across the curriculum to develop critical thinking, social literacy, and inquiry skills. Previously offered as CIED 4023.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

### CIED 3253 Teaching Language Arts in the Elementary and Middle School

**Prerequisites:** ENGL 1113 and ENGL 1213 and ENGL 2413.

**Description:** Learning theory, content, and methods related to teaching spoken, written, and visual forms of communication. Focus is on listening, speaking, writing and on teaching knowledge, skills and strategies inherent in those processes. Stresses integration of central literacy components (reading, writing, speaking, listening to, and viewing a wide range of texts in a variety of forms) and across the curriculum, teaching diverse learners and perspectives, inquiry, and critical literacy.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

### CIED 3293 Teaching Reading in the Elementary and Middle School

**Prerequisites:** ENGL 1113 and ENGL 1213 and ENGL 2413.

**Description:** Learning theory, content and methods specifically related to teaching children to read a wide range of texts for a wide range of purposes. Understandings of central reading components such as print awareness, phonological/phonemic awareness, phonics, fluency, vocabulary, comprehension, and critical literacy. Best practices for teaching reading effectively for diverse learners with varied needs and interests. Includes program phonics exam.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

### CIED 3313 Field Experience in the Secondary Schools

**Prerequisites:** Consent of instructor, 2.50 GPA, and passing scores on the Oklahoma General Education Test.

**Description:** Seminars, directed observation and participation in a particular subject area of the secondary/K-12 school. Experience in meeting the mental, social, physical, and cultural needs among children. Previously offered as CIED 3712.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Clinical, Lecture, Lecture Clinical

**Department/School:** Teaching, Learning, Ed Science

### CIED 3622 Middle Level Education

**Prerequisites:** CIED 2453.

**Description:** Overview of the nature of young adolescents as well as an examination of the curriculum, instruction, and organization of middle grade schools. Also includes a field-based experience in a middle school. Previously offered as CIED 3623.

**Credit hours:** 2

**Contact hours:** Lecture: 1 Lab: 2 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 3753 Teaching Social Studies through Inquiry****Prerequisites:** Completion of CIED 3313 or consent of instructor.**Description:** This course is designed to develop pre-service teachers' skills to teach social studies through an inquiry approach. Guided readings, discussions, group activities, and project based learning will focus on structuring an inquiry-based secondary classroom through the use of primary sources.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 4000 Field Studies in Education****Description:** Independent study and/or field experiences, such as spending a semester in an experimental program working with handicapped children in schools, in-depth studies in research projects, internships with school personnel. Graded on a pass-fail basis. Offered for variable credit, 1-4 credit hours, maximum of 4 credit hours.**Credit hours:** 1-4**Contact hours:** Contact: 1-4 Other: 1-4**Levels:** Undergraduate**Schedule types:** Independent Study**Department/School:** Teaching, Learning, Ed Science**CIED 4005 Literacy Assessment and Instruction****Prerequisites:** CIED 3005 or HDFS 3213.**Description:** Provides a comprehensive survey of teaching strategies, formal and informal assessment, curriculum materials, theory, and research pertaining to reading, writing, spelling and oral language development at the primary and elementary school levels. Practical experiences required.**Credit hours:** 5**Contact hours:** Lecture: 4 Lab: 2 Contact: 6**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Teaching, Learning, Ed Science**CIED 4012 Integration of Literacy****Prerequisites:** CIED 4005; full admission to Professional Education.**Description:** Integration of reading, writing, and oral language; integration of literacy instruction into the content areas in elementary school curriculum.**Credit hours:** 2**Contact hours:** Lecture: 2 Contact: 2**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 4041 Interdisciplinary Curriculum Design and Development****Prerequisites:** Full admission to Professional Education and concurrent enrollment in 3430, 4012, 4153, 4323, 4353, and 4362.**Description:** Planning and development of interdisciplinary teaching units for the elementary school classroom. Pedagogical approaches and materials for teaching integrated themes, as well as research on effective integrated teaching practices.**Credit hours:** 1**Contact hours:** Lab: 2 Contact: 2**Levels:** Undergraduate**Schedule types:** Lab**Department/School:** Teaching, Learning, Ed Science**CIED 4073 Elementary School Curriculum Design and Development****Prerequisites:** Full admission to Professional Education.**Description:** Students will understand and learn to apply the foundations of elementary curriculum, the processes of designing curriculum for elementary classrooms, the analysis of instructional practices, and the data driven decision making to improve student learning. May not be used for degree credit with CIED 5093.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 4093 Teaching Grammar in the Secondary Schools****Prerequisites:** ENGL 4013 (or concurrent enrollment) or instructor permission is required.**Description:** Inductive teaching of grammar and usage for writing and oral communication. Lessons include learning to teach literary devices, poetic nomenclature, etymology of idiomatic expressions, and such linguistic elements as homonyms, synonyms, and antonyms.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 4103 Introduction to English Learners for Early Childhood and Elementary Teachers****Description:** This course facilitates prospective early childhood and elementary education teachers' learning about how to educate English Learners in their classes, schools, and communities. Taking a comprehensive, learner-centered approach to research, theory, policy, and practice, topics covered include current trends, pedagogical strategies, and instructional theories related to English Learners in early childhood and elementary schools. May not be used for degree credit with CIED 4133.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 4133 Introduction to K-12 English Language Learners****Description:** This course facilitates prospective teachers' learning about how to educate English Language Learners in their classes, schools, and communities. Taking a comprehensive, learner-centered approach to research, theory, policy, and practice, topics covered include current trends, pedagogical strategies, and instructional theories related to English Language Learners.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science

**CIED 4194 Teaching Writing in the Secondary School**

**Prerequisites:** ENGL 1113, ENGL 1213, ENGL 3203, all with grade of "B" or better; ENGL 4013 or concurrent or with instructor permission.

**Description:** Teaching secondary writing inductively in order to build on future students' reasoning skills ultimately leading to cogent, cohesive, audience-appropriate multimodal composition. Previously offered as CIED 4193.

**Credit hours:** 4

**Contact hours:** Lecture: 4 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4213 Introduction to Visual Arts in the Curriculum**

**Description:** Provides an understanding of the theoretical basis for the use of art activities in developing sensory perception and aesthetic sensitivity as an integral part of the curriculum. Includes a wide range of opportunities for student involvement in experimentation and exploration with a variety of two- and three-dimensional art media. Emphasis on both creative expression and appreciation of the visual arts in the home, school and community as a vital aspect of instruction in the school, preschool level through grade eight. May not be used for degree credit with CIED 5350.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 4233 Literacy Assessment and Instruction**

**Prerequisites:** CIED 3293 and CIED 3253.

**Description:** Selection, administration, and interpretation of a variety of formal and informal literacy assessments. Use of assessment results to plan, evaluate, and revise effective instruction for diverse learners within an assessment/evaluation/instruction cycle. Tutoring practicum is required.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 4243 Creativity and Critical Thinking in the K12 Classroom**

**Description:** Preparation of teachers as facilitating critical thinking and creativity opportunities for elementary and secondary students. Skills in cross-curricular content integration, the elements and processes of appreciation and creation of multiple forms of art (performing, visual, digital, media, et. al) and pedagogical approaches to critical thinking competencies. May not be used for degree credit with CIED 4213.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4263 Teaching and Learning Foreign Languages in the Elementary Schools (Grades 1-8)**

**Description:** Purpose, selection and organization of foreign language curriculum content, teaching and learning theories, and procedure and evaluation of outcome for diverse students. Teaching techniques and materials for grades 1-8. May not be used for degree credit with CIED 5303.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4313 Young Adult Literature**

**Prerequisites:** Senior or Graduate level standing.

**Description:** Survey of print and non-print materials, including multicultural and multi-ethnic materials for young adults from middle school through high school. History, criticism, selection, and evaluation of young adult literature and exploration of its relation to the needs and interests of young people. May not be used for degree credit with CIED 5513.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4323 Social Studies in the Elementary School Curriculum**

**Prerequisites:** Full admission to Professional Education.

**Description:** Purposes, selection and organization of content, teaching and learning procedures, and evaluation of outcomes in elementary social studies. May not be used for degree credit with CIED 5323.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4373 Classroom Environments and Experience**

**Description:** Introduction to the design and management of the physical, social, intellectual aspects of the elementary classroom. Overview of the purposes, selection and organization of classroom management systems and teaching approaches. Directed observation and participation in classrooms. Previously offered as CIED 4362. May not be used for degree credit with CIED 5363.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 4450 Internship in Elementary Education**

**Prerequisites:** Concurrent enrollment in CIED 4453 or CIED 4720 and CIED 4730, successfully pass the subject area test, and full admission to Professional Education.

**Description:** Advanced clinical experience as associate (student) teacher in schools, pre-kindergarten through grade eight. Graded on a pass-fail basis. Offered for variable credit, 1-12 credit hours, maximum of 12 credit hours.

**Credit hours:** 1-12

**Contact hours:** Contact: 1-12 Other: 1-12

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 4453 Senior Seminar in Elementary Education**

**Prerequisites:** Concurrent enrollment in CIED 4450 and full admission to Professional Education.

**Description:** Legal and ethical issues, forms of assessment, including standardized testing, working with colleagues and other professionals, integration of performing arts including music and drama, and completion of a professional portfolio. Taken concurrently with student teaching in the final semester of the elementary education program.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4463 Senior Seminar: Learning and Teaching in Diverse School Cultures**

**Prerequisites:** Senior classification; full admission to Professional Education and concurrent enrollment in CIED 4450.

**Description:** Designing elementary classroom environments and curriculum that meet the needs of diverse populations.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4473 Reading for the Secondary Teacher**

**Prerequisites:** Consent of instructor, 2.50 GPA, and passing scores on the Oklahoma General Education Test.

**Description:** Materials and procedures in the teaching of reading in secondary schools for content area teachers.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4713 Teaching and Learning in the Secondary School**

**Prerequisites:** Full admission to Professional Education and consent of instructor.

**Description:** Purposes, selection and organization of curriculum content, teaching and learning theories and procedures, and evaluation of outcomes for diverse students. Teaching techniques and materials for art, English, foreign languages, science, and the social studies. This course MUST be taken the semester prior to student teaching/internship. May not be used for degree credit with CIED 5713.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4720 Internship in the Secondary Classroom**

**Prerequisites:** CIED 4713, CIED 4724 or CIED 4734 or CIED 4744, full admission to Professional Education and successfully passing the subject area test in the content area of Internship.

**Description:** Supervised observation and student teaching in fields in which the student intends to qualify for teaching certification. Development of awareness of and experience with mental, social, physical and cultural differences among adolescents. Graded on a pass-fail basis. Offered for variable credit, 1-12 credit hours, maximum of 12 credit hours.

**Credit hours:** 1-12

**Contact hours:** Contact: 1-12 Other: 1-12

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 4724 Classroom Management in the Multicultural PK-12/ Secondary School**

**Prerequisites:** Full admission to Professional Education.

**Description:** An overview of classroom management and discipline approaches, parental involvement, school climate, and community relations. Includes field experiences in a diverse secondary classroom. Course previously offered as CIED 4723. May not be used for degree credit with CIED 5724.

**Credit hours:** 4

**Contact hours:** Lecture: 2 Lab: 4 Contact: 6

**Levels:** Undergraduate

**Schedule types:** Clinical, Lecture, Lecture Clinical

**Department/School:** Teaching, Learning, Ed Science

**CIED 4734 Planning and Management in the Multicultural Foreign Language K-12 Classroom**

**Prerequisites:** Full admission to Professional Education.

**Description:** An overview of classroom management and discipline approaches, parental involvement, school climate, and community relations. Includes field experiences in a diverse secondary classroom.

**Credit hours:** 4

**Contact hours:** Lecture: 2 Lab: 4 Contact: 6

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 4744 Planning and Management in the Multicultural Art K-12 Classroom**

**Prerequisites:** Full admission to Professional Education.

**Description:** An overview of classroom management and discipline approaches, parental involvement, school climate, and community relations. Includes field experiences in a diverse secondary classroom. Previously offered as CIED 4730.

**Credit hours:** 4

**Contact hours:** Lecture: 2 Lab: 4 Contact: 6

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science



**CIED 4813 Second Language Acquisition Research and Pedagogy**

**Description:** The overall focus of this course is on introduction to theory, research, and practice in the fields of first and second language acquisition; understanding of language acquisition at various developmental levels, both within and outside of the classroom; and application of language acquisition theories to instructional practice. May not be used for degree credit with CIED 5843.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 4823 Foreign Language Instruction, Curriculum, and Assessment: Grades PK-12**

**Prerequisites:** CIED 4813.

**Description:** History of foreign language education and teaching; understanding the role of foreign language in PK-12 programs; application of national and state foreign language learning standards in instructional planning; application of approaches, methods, strategies, and techniques of foreign language teaching; utilization of assessment tools to obtain information about foreign language learners' learning; and selection, evaluation, development, and modification of foreign language curricula. May not be used for degree credit with CIED 5863.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5000 Master's Report or Thesis**

**Prerequisites:** Consent of adviser.

**Description:** Students studying for a master's degree enroll in this course for a total of 2 credit hours if they write a report or 6 hours if they write a thesis. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 5010 Practicum for Early Career Secondary Teachers**

**Prerequisites:** Admission into the Secondary Teaching Graduate Certificate Program or permission of instructor.

**Description:** Facilitated mentoring support for performing professional functions in classroom settings for early career teachers. Offered for variable credit, 1-4 credit hours, maximum of 4 credit hours.

**Credit hours:** 1-4

**Contact hours:** Contact: 1-4 Other: 1-4

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 5033 Teaching Foreign Languages in the Schools K-12**

**Description:** Curriculum, materials, methods and procedures related to foreign languages (grades K-12).

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5043 Issues in Teaching**

**Description:** Current issues and trends in teaching theory, practice and research with emphasis on teacher reflection.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5053 Curriculum Issues**

**Description:** A study of curriculum that includes philosophy, history, decision-making, major concepts and terms.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5073 Pedagogical Research**

**Description:** Theory and application of pedagogical inquiry with emphasis on teacher as researcher, pedagogical question posing, and techniques of pedagogical inquiry, including narrative, autobiography, case writing, action research, and artifactual documentation of teacher performance.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5093 Curriculum Design**

**Description:** The theorizing and practical development of course and curriculum design. Focus on learning sciences, social implications, and interpreting student goals through state and national standards.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5123 Curriculum in the Secondary School**

**Description:** Contemporary curricular issues, philosophies, and points of view in secondary school education.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5143 Language Arts in the Curriculum**

**Description:** Content and current issues in the language arts. Materials and methods for teaching the communication skills.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5153 Advanced Studies in Children's Literature**

**Description:** Study of children's literature within the prevailing political, economic and social factors influencing cultural patterns and values. The tools of research in children's literature and the nature and direction of contemporary children's book publishing.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5173 Kindergarten-Primary Curriculum**

**Description:** Study of kindergarten-primary curriculum, including philosophy, history, current practice, and issues. For administrators, teachers and students in curriculum and early childhood education.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5183 Media Literacy Across the Curriculum**

**Description:** Examination of the history of media literacy. Major topics and issues in the field of media literacy and curriculum in media literacy across subject areas.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5203 Foundations of Literacy Education 1-8**

**Description:** Major literacy theories, content, and pedagogy with a required 45-hour field experience. For graduate students seeking initial certification in elementary education.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5213 Introduction to Teaching and Learning**

**Prerequisites:** Admission to the MAT program.

**Description:** Overview of teaching and learning in the 21st Century. Requires field experience in PK-12 Classrooms.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Graduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 5303 Teaching and Learning Foreign Languages in the Elementary Schools (Grades 1-8)**

**Description:** Purpose, selection and organization of foreign language curriculum content, teaching and learning theories, and procedure and evaluation of outcome for diverse students. Teaching techniques and materials for grades 1-8. May not be used for degree credit with CIED 4263.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5310 Field Experience in the Elementary School**

**Description:** Directed observation and participation in classrooms, First through grade eight. Concurrent seminar exploring multicultural education and integrated programs. Offered for variable credit, 1-2 credit hours, maximum of 3 credit hours. Corequisite(s): CIED 4362; full admission to Professional Education.

**Credit hours:** 1-2

**Contact hours:** Lab: 3-6 Contact: 3-6

**Levels:** Graduate, Undergraduate

**Schedule types:** Lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 5313 Curriculum of the Elementary School**

**Description:** Contemporary trends, philosophies and points of view in elementary school education. Previously offered as CIED 6113.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5323 Teaching Social Studies in the Schools**

**Description:** Curriculum, materials, methods, and procedures related to social studies.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5333 Effective Classroom Management for Secondary Schools**

**Prerequisites:** Admission into the Secondary Teaching Graduate Certificate Program or permission of instructor.

**Description:** Examines classroom management, classroom discipline, and education issues of immediate concern (culturally responsive pedagogy, social justice, anti-bias applications, and using diverse technologies in the secondary classroom) for novice teachers. Course is required in the Graduate Certificate for Effective Teaching in Secondary Schools program.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5343 Introduction to K-12 English Language Learners**

**Description:** Pedagogical strategies and instructional theories related to English Language Learners and culturally diverse students.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5350 The Visual Arts in the Curriculum**

**Description:** Creative approaches to the use of two- and three-dimensional media as they relate to various aspects of education. Opportunities available for periodic group and individual evaluation in order to give direction and significance to future growth. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 5353 Literature for Children, Adolescents and Adults**

**Description:** Exploration of the elements and characteristics of quality literature for readers of all ages, addressing evaluation, selection, and utilization. Research component requiring learners to design and conduct relevant research into literature learning and engagement with selected populations.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5363 Effective Teaching Strategies for the 6-12 Classroom**

**Prerequisites:** Admission into the Secondary Teaching Graduate Certificate Program or permission of instructor.

**Description:** Includes a study of effective instructional practices and assessment in the 6-12 classroom. Topics will include but not be limited to: research-based models of instruction, teacher questioning, facilitating classroom discussions, lesson planning, assessment, differentiated instruction, culturally responsive pedagogy, and teaching culturally and linguistically diverse learners. Course is required as part of the graduate certificate program for Effective Teaching in the Secondary Schools.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5373 Design and Management of the Elementary School Classroom**

**Description:** Introduction to the design and management of the physical, social, and intellectual aspects of the elementary classroom. Overview of the purposes, selection and organization or applicable classroom management systems and teaching approaches. May not be used for degree credit with CIED 4362. Previously offered as CIED 5362.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5403 Teaching and Learning in the Secondary Schools: English Language Arts Methods**

**Prerequisites:** Admission into the Secondary Teaching Graduate Certificate Program or permission of instructor.

**Description:** Examines current trends and issues in Secondary English Language Arts. The major focus is to provide an overview of instructional strategies, assessment techniques, and curriculum development. Course is required in the Graduate Certificate for Effective Teaching in Secondary Schools program.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5413 Teaching and Learning in the Secondary Schools: Social Studies Methods**

**Prerequisites:** Admission into the Secondary Teaching Graduate Certificate Program or permission of instructor.

**Description:** Examines current trends and issues in Secondary Social Studies Education. The major focus is to provide an overview of instructional strategies, assessment techniques, and curriculum development. Course is required in the Graduate Certificate for Effective Teaching in Secondary Schools program.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5423 Literacy Instruction in Primary Grades**

**Description:** Analysis of growth in literacy from the preschool level through early elementary years. Examination of literacy learning processes and instructional procedures.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5433 Reading and Writing in the Content Areas**

**Description:** Study of the development and use of reading and writing across the content areas.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5443 Teaching Reading with Literature**

**Description:** Teaching reading comprehension strategies through the use of children's literature. Designed to prepare library media specialists and other literacy educators to explicitly teach comprehension strategies to PK-12 students.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5450 Internship in Elementary Education**

**Prerequisites:** Full admission to professional education; successfully pass the subject area OSAT; successful completion of all other course work.

**Description:** Clinical internship for teacher candidates in schools. Concurrent seminar on educational policy, legal, and curriculum development issues. Offered for variable credit, 3-6 credit hours, maximum of 9 credit hours.

**Credit hours:** 3-6

**Contact hours:** Lab: 6-12 Contact: 6-12

**Levels:** Graduate

**Schedule types:** Lab

**Department/School:** Teaching, Learning, Ed Science



**CIED 5453 Infusing Aesthetics Across the Curriculum**

**Description:** Teachers enliven curriculum by cultivating students' aesthetic sensibilities across all disciplines. Historically, the field of Aesthetics has been concerned with notions of beauty, ugliness, contemplation, criticism, and elegance among others. Within Curriculum Studies, developing aesthetic awareness also involves engaging all of the senses in the teaching and learning process, approaching curriculum as embodied and holistic, stimulating imagination, and fostering enthusiasm for learning. Historical development of the field of aesthetics and its impact.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5463 Practicum I: Literacy Assessment and Instruction**

**Prerequisites:** CIED 5423 and CIED 5143 or consent of instructor.

**Description:** Development of knowledge of reading, writing, and language assessment and instruction for K-12 students. 11 hours of supervised field experience for authentic literacy assessment, evaluation, and tutoring, plus 10-15 hours of targeted lesson planning outside of class meetings.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5473 Reading & Writing Difficulties**

**Description:** Study of research and formal assessment tools related to reading and writing difficulties in children and adults.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5483 Literacy and Technology Across the Curriculum**

**Description:** The characteristics of computer-facilitated learning relating to broad definitions of literacy. Use of a variety of computer and literacy tools across the curriculum.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5493 Multisensory Phonics Instruction**

**Description:** This course provides in-depth content specifically focused on evidence-based instruction in phonemic awareness, systematic and explicit phonics, and spelling. The course supports teachers and reading specialists who work with students with dyslexia.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5513 Young Adult Literature**

**Description:** Survey of print and non-print materials, including multicultural and multi-ethnic materials for young adults from middle school through high school. History, criticism, selection, and evaluation of young adult literature and exploration of its relation to the needs and interests of young people. May not be used for degree credit with CIED 4313.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5523 Practicum II: Advanced Literacy Interventions**

**Prerequisites:** CIED 5463 or consent of instructor.

**Description:** Assessment, evaluation, and targeted instruction in reading and writing for K-12 students who experience difficulty learning literacy processes. Collaboration among teachers, literacy coaches, and resource personnel. Includes 11 hours of supervised practicum focused on small group intervention instruction. Previously offered as CIED 5520.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5553 Literacy Leadership and Coaching**

**Prerequisites:** CIED 5463.

**Description:** Develops skills and knowledge for school literacy program design and leadership, and for coaching other teaching professionals in literacy teaching.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5573 Using Assessment to Understand Early Readers in Reading Recovery**

**Description:** Focus on the administration and interpretation of Marie Clay's An Observation Survey of Early Literacy Achievement and intervention procedures that will support the beginning reader for whom reading and writing does not come easily. Graduate students will teach four children while learning Reading Recovery procedures. In addition, graduate students will observe children and teachers interacting behind a one-way glass.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5583 Responsive [Reading Recovery] Teaching to Accelerate Early Reading Progress**

**Description:** Focus on the refinement of the Reading Recovery procedures used with beginning readers for whom learning to read and write does not come easily. Attention will be directed to teacher decision-making while working with four children. All enrolled in the course will be involved in teaching and observing children behind a one-way glass.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5623 Multicultural and Diversity Issues in Curriculum**

**Description:** Understanding of the historical and contemporary perspectives toward cultural diversity. Development of an awareness of diverse culture and language communities; understanding of critical issues of race, class, gender, and ethnicity in education; perennial issues of multiculturalism in public education and in global society; a comprehensive overview of principles and current research on bilingual and multicultural education.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5640 Special Topics in Literacy Education**

**Description:** Topics vary to address special topics in literacy education. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Lecture: 1-6 Contact: 1-6

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5643 Integrating Teaching at the Elementary Level**

**Description:** Study and analysis of theories related to children's learning and implications for integrating teaching at the elementary level. Examination of teachers, own practices through reflection and research, study diverse populations, share teaching approaches and materials across the curriculum, and explore outreach to school, family and community.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5663 Integrating Teaching in the Secondary School**

**Description:** In-service for middle to secondary teachers especially with professional development in their own school settings and in further graduate work. Examination of own practices through reflection and research, study of diverse adolescents, sharing of teaching approaches and materials across the curriculum, and exploration of outreach to school, family and community. Teacher leadership. Previously offered as CIED 5664.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5710 Internship in Secondary School**

**Prerequisites:** Full admission to professional education; successfully pass the subject area OSAT; successful completion of all other course work.

**Description:** Advanced clinical experience for teacher candidates (student teacher) in secondary schools. Offered for variable credit, 3-6 credit hours, maximum of 9 credit hours.

**Credit hours:** 3-6

**Contact hours:** Lab: 6-12 Contact: 6-12

**Levels:** Graduate

**Schedule types:** Lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 5713 Teaching and Learning in the Secondary School**

**Prerequisites:** Full admission to Professional Education.

**Description:** Purposes, selection and organization of curriculum content, teaching and learning theories and procedures, and evaluation of outcomes for diverse students. Teaching techniques and materials for art, English, foreign languages, science, and the social studies. This course **MUST** be taken the semester prior to student teaching/internship. May not be used for degree credit with CIED 4713.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5720 Education Workshop**

**Description:** For teachers, principals, superintendents and supervisors who need advanced curriculum and instruction course work related to K-12 subject areas and pedagogy, in the areas of instruction and administration. Students must register for the full number of credit hours for which the workshop is scheduled for a particular term. Offered for variable credit, 1-8 credit hours, maximum of 8 credit hours.

**Credit hours:** 1-8

**Contact hours:** Contact: 1-8 Other: 1-8

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 5723 Gender and Curriculum**

**Description:** An overview of gender issues in curriculum theory and practice. Understanding of historical and contemporary perspectives on gender in the context of schooling, pedagogy, and education.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5724 Classroom Management in the Multicultural PK-12/Secondary School**

**Prerequisites:** Full admission to Professional Education.

**Description:** An overview of classroom management and discipline approaches, parental involvement, school climate, and community relations. Includes field experiences in a diverse secondary classroom. Course previously offered as CIED 4723. May not be used for degree credit with CIED 4724.

**Credit hours:** 4

**Contact hours:** Lecture: 2 Lab: 4 Contact: 6

**Levels:** Graduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 5730 Seminar in Education**

**Description:** Seminar topics may differ depending upon the nature of current interests and topics in American education. May not be used for degree credit with SMED 4560. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 5733 History of Reading**

**Prerequisites:** Graduate standing with the Graduate College.

**Description:** This course provides an examination of the historical landscape of reading education paradigms, research, theory development, instruction, and policy in the U.S. Key research pioneers in reading/ literacy education and their work, from a variety of "camps" (e.g. psychological or information processing, phonics, behaviorist, constructivist, reading and writing process, socio-cultural, etc.), will also be examined.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5810 Internship Art and Foreign Language in PK-12 School**

**Prerequisites:** Full admission to professional education; successfully pass the subject area OSAT; successful completion of all other course work.

**Description:** Advanced clinical experience for art or foreign language teacher candidates (student teacher) in PK-12 schools. Offered for variable credit, 3-6 credit hours, maximum of 9 credit hours.

**Credit hours:** 3-6

**Contact hours:** Lab: 6-12 Contact: 6-12

**Levels:** Graduate

**Schedule types:** Lab

**Department/School:** Teaching, Learning, Ed Science

**CIED 5813 Educational Advocacy and Leadership**

**Description:** Preparation of teachers as advocates and leaders in educational policy and practice at various levels. Skills in action research, policy analysis, and coalition building leading to advocacy.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5823 Mindfulness, Curriculum, and Teaching**

**Description:** The concept of mindfulness and its meanings for education. Theory and practice of mindful curriculum and teaching.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5843 First and Second Language Acquisition for Teachers**

**Description:** The overall focus of this course is on introduction to theory, research, and practice in the fields of first and second language acquisition; understanding of language acquisition at various developmental levels, both within and outside of the classroom; and application of language acquisition theories to instructional practice. May not be used for degree credit with CIED 4813.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5850 Directed Study**

**Prerequisites:** Consent of instructor.

**Description:** Directed study for master's level students. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 5853 Teaching Writing GR 1-8**

**Prerequisites:** Admission into MAT program.

**Description:** Learning theory, content, and methods related to teaching spoken, written, and visual forms of communication. Focus on listening, speaking, writing and on teaching knowledge, skills and strategies inherent in those processes. Stresses integration of central literacy components and across the curriculum, teaching diverse learners and perspectives, inquiry, and critical literacy. Meets with CIED 3253. No degree credit for those with credit in CIED 3253.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5863 Foreign Language Instruction, Curriculum and Assessment: Grades Pk-12**

**Description:** History of foreign language education and teaching; understanding the role of foreign language in PK-12 programs; application of national and state foreign language learning standards in instructional planning; application of approaches, methods, strategies, and techniques of foreign language teaching; utilization of assessment tools to obtain information about foreign language learners' learning; and selection, evaluation, development, and modification of foreign language curricula. May not be used for degree credit with CIED 4863.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5893 Reading Processes and Practices GR 1-8**

**Prerequisites:** Graduate Standing and consent of Instructor.

**Description:** Learning theory, content, and methods specifically related to teaching children to read a wide range of texts. Understandings of central reading components such as print awareness, phonological/ phonemic awareness, phonics, fluency, vocabulary, comprehension, and critical literacy. Best practices for teaching reading effectively for diverse learners with varied needs and interests. Includes program phonics exam. Meets with CIED 3293. No degree credit for those with credit in CIED 3293.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 5963 Teaching Grammar in the Secondary Schools****Prerequisites:** Graduate status or instructor permission.**Description:** Students learn to teach language inductively to build thinking, language and writing skills. Meets with CIED 4093. No degree credit for those with credit in CIED 4093.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 5973 Formative Literacy Assessment GR 1-8****Prerequisites:** CIED 5893 and CIED 5853; or consent of instructor.**Description:** Selection, administration, and interpretation of a variety of formal and informal literacy assessments. Use of assessment results to plan, evaluate, and revise effective instruction for diverse learners within an assessment/evaluation/instruction cycle. Tutoring practicum required. Meets with CIED 4233. No degree credit for those with credit in CIED 4233.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 5993 Teaching Writing in the Secondary Schools****Prerequisites:** Graduate status or instructor permission.**Description:** Students learn to teach writing inductively by building the reasoning skills that lead to cogent, cohesive, audience-appropriate writing. Focus is on increasing the underlying skills necessary for writing description through argumentation. Meets with CIED 4193. No degree credit for those with credit in CIED 4193 or CIED 4194.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 6000 Doctoral Dissertation****Description:** Required of all candidates for the Doctor of Philosophy degree. Credit is given upon completion of the dissertation. Offered for variable credit, 1-25 credit hours, maximum of 25 credit hours.**Credit hours:** 1-25**Contact hours:** Contact: 1-25 Other: 1-25**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Teaching, Learning, Ed Science**CIED 6030 Contemporary Issues in Curriculum Studies****Description:** Examination of selected contemporary topics in curriculum studies. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.**Credit hours:** 1-6**Contact hours:** Contact: 1-6 Other: 1-6**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Teaching, Learning, Ed Science**CIED 6033 Analysis of Teaching****Description:** Advanced study of multiple forms of analysis of teaching such as behavioral, phenomenological, and constructivist with emphasis on major research on teacher reflection and teacher narrative.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 6040 Special Topics in College Curriculum and Teaching****Description:** Topics vary to address issues related to college curriculum and teaching at various levels of higher education. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.**Credit hours:** 1-6**Contact hours:** Lecture: 1-6 Contact: 1-6**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 6043 Curriculum Leadership****Description:** A study of curriculum leadership and implications for schooling; focus on what it means to be a curriculum leader in times of major societal change and educational reform.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 6053 Advanced Curriculum Studies****Description:** In-depth examination of key concepts, topics, trends, and the interdisciplinary nature of curriculum studies. Critical analysis of contemporary curriculum discourses.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**CIED 6060 Advanced Special Topics in Literacy Education****Description:** Topics vary to address special topics in literacy education at the doctoral level. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.**Credit hours:** 1-6**Contact hours:** Contact: 1-6 Other: 1-6**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Teaching, Learning, Ed Science**CIED 6063 Curriculum History****Description:** Examines in-depth the history of various movements in U.S. curriculum thinking and the individuals who promoted them, with attention to the cultural and institutional contexts within which they worked. Emphasis is given to primary sources and the position of curriculum thinking within evolving educational thinking.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science

**CIED 6070 Seminar in Arts and Humanities Education**

**Prerequisites:** Graduate standing or instructor permission is required.

**Description:** Topics, research trends, theories, themes, and/or problems of interest and use in research, theorizing, publishing, and teaching. Particular focus on the skill of writing a theoretical lens and analyzing texts through that lens. Offered for fixed credit, 3 credit hours, maximum of 6 credit hours.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6073 Advanced Pedagogical Research**

**Description:** Advanced theory and application of pedagogical research with emphasis on teacher as researcher, teacher research as professional development and education reform, techniques of pedagogical research and pedagogical question posing.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6090 Readings in Arts and Humanities Education**

**Prerequisites:** Graduate standing or instructor permission is required.

**Description:** In-depth readings specific to research and theorizing in arts and humanities education. Focusing on analysis, students examine primary texts and related secondary texts. Offered for fixed credit, 3 credit hours.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6133 Theory to Practice in Education**

**Description:** A culminating seminar demonstrating the application of theory from several disciplines to the practical problems of education: curriculum development, organization, teaching strategies and evaluations.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6143 School Reform**

**Description:** Current issues in school reform with an emphasis on U.S. education; focus on what it means to engage in reform from dual points of view: curriculum leader and recipient of reform mandate.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6153 Curriculum of Nonviolence**

**Description:** The concept of nonviolence and its implications for curriculum and education. Curriculum dynamics of nonviolence. Curriculum theory and practice for, about, and through nonviolence.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6163 Advanced Research Strategies in Curriculum**

**Prerequisites:** SCFD 6113.

**Description:** Exploration of designs and methods within qualitative and quantitative research as applied to the field of curriculum. Articulation on how to ensure that both qualitative and quantitative studies meet their respective standards of rigor. Previously offered as CIED 5063.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6173 International Peace Curriculum Development**

**Description:** Conceptual foundations of peace education; theory and practice of developing school and college curriculum about and for international peace; case studies of international conflict resolution and peace curriculum.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6183 Advanced Media Literacy Across the Curriculum**

**Description:** This course examines the interdisciplinary area of media literacy across the curriculum. Major themes such as issues of hegemony and strategies of media literacy in diverse classrooms will be explored. Students will analyze and evaluate various curriculum theories as applied to media literacy as well as research in the field. Finally, the future of media literacy and debates in the field will be considered.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6253 Designing and Conducting Mixed Methods Research**

**Prerequisites:** REMS 5953 (or equivalent) and SCFD 5913 (or equivalent); admittance to a doctoral level program.

**Description:** Participants will examine the history, philosophical foundations, and methodological issues of mixed methods research.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6433 Seminar in Literacy**

**Description:** Research of issues in literacy education using knowledge gained through both research and classroom practice.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science



**CIED 6503 Doctoral Seminar**

**Description:** In-depth investigation into the doctoral experience and the professoriate including research and writing for the dissertation and for publication; grant writing; professionalism and ethics; professional service; and teaching in higher education. Primarily for students in the PhD program in Curriculum Studies and Professional Education Studies.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6850 Directed Reading**

**Prerequisites:** Consent of instructor.

**Description:** Directed reading for students with advanced graduate standing to enhance students' understanding in areas where they wish additional knowledge. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 6853 Improvement of Instruction in Reading**

**Description:** Problems and issues related to reading instruction. The roles of various school personnel in changing curriculum and methods.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**CIED 6880 Internship in Education**

**Prerequisites:** Consent of instructor.

**Description:** Directed off-campus experiences designed to relate ideas and concepts to problems encountered in the management of the school program. Offered for variable credit, 1-8 credit hours, maximum of 8 credit hours.

**Credit hours:** 1-8

**Contact hours:** Contact: 1-8 Other: 1-8

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**CIED 6910 Practicum**

**Prerequisites:** Consent of adviser.

**Description:** Helps the student carry out an acceptable research problem (practicum) in his/her local school situation. Credit given upon completion of the written report. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**EPSY 1003 Learning to Learn**

**Description:** Learning effective strategies to succeed through online individualized assessment, positive attitude development, habit change, development and self-efficacy and self-regulation. Learning tools include goal setting, developing information skills, questioning, transformational learning, presentation and information use skills. Analyzing class materials, problem solving, creativity, teacher analysis, reflection, developing classroom motivation and appropriate classroom behavior to lead to classroom success.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 1013 Emotional Skills in Learning Success**

**Description:** Striving for academic excellence through self awareness and growth in areas of social and emotional development. Interpersonal and intrapersonal skills, leadership skills, and self-management skills in the context of emotional intelligence theories.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 2513 Foundations of Ethical Leadership**

**Prerequisites:** 24 hours in good standing; admission into the UGLC or consent of instructor.

**Description:** Introduces students to a variety of theoretical views of ethics and leadership studies through the identification of contemporary ethical challenges and the development of foundational leadership skills to meet those challenges. Same course as HESA 2513.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 3063 Critical Thinking, Problem Solving, and Creative Processes**

**Description:** Learning theory in developing strategies for promoting critical thinking, problem solving, and creativity.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 3110 Educational Psychology Seminar**

**Description:** Problems, trends, contemporary topics, and pertinent issues in educational psychology. Concentrated study of selected areas not usually addressed in the undergraduate curriculum. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 3113 Psychological Foundations of Childhood**

**Description:** The child from conception to puberty with focus on educational implications of development in cognitive, affective and psychomotor domains. Previously offered as ABSE 3113.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 3213 Psychology of Adolescence**

**Description:** The adolescent from pubescence to adulthood with focus on educational implications of development in cognitive, affective and psychomotor domain. Course previously offered as ABSE 3213.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 3413 Child and Adolescent Development**

**Description:** The person from conception through adolescence with focus on education implications of development in cognitive, affective, social, and physical domains. Course previously offered as ABSE 3413.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 3533 Motivating Learners**

**Description:** Current practices in learner motivation, school age through adult. Developing positive attitudes and building community in classrooms to stimulate motivation of all learners.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 4063 Exploration of the Creative Experience**

**Description:** The creative experience in art (visual to performing), articulation (oratory to literature), thought (philosophy to psychology), business (practices to products), leisure (procreation to recreation). Western and Eastern viewpoints. Personal creative development fostered by modeling and by investigation of proven techniques. A wide range of creative endeavor with an experiential approach. Future-oriented applications. Course previously offered as ABSE 4063.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 4223 Psychological Foundations of Learning and Instruction**

**Description:** Instructional psychology focusing on the study of teaching and learning theory as part of an instructional program to deal with individual, cultural, and environmental differences. Case studies and group discussion emphasizing motivation, planning, evaluation, classroom problems and management.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 4503 Ethical Leadership for the Common Good**

**Prerequisites:** EPSY 2513 or HESA 2513.

**Description:** Builds on foundational model of ethical theory and leadership studies through application of ethical theory and leadership skills to specific contexts and evaluation of their results. Same course as HESA 4513.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 4533 Competency Motivation**

**Description:** Development of competence through the application of research strategies in achievement motivation. Examines intellectual ability, motives, goals, attributions, competence perceptions and values as they relate to developmental issues, demographics, contextual influences, culture, and self-regulation.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 4743 Learning, Motivation, and Social Justice (I)**

**Description:** Foundational principles of learning, motivation, and global identity; critical analysis of contemporary cultures; and application of learning in addressing global issues of social justice.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**General Education and other Course Attributes:** International Dimension

**EPSY 5000 Master's Thesis**

**Prerequisites:** Consent of advisory committee chairperson.

**Description:** Report of research conducted by a student in the master's program in school and educational psychology. Credit given and grade assigned upon completion and acceptance of the thesis. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5001 Colloquium: Educational Psychology**

**Description:** Discussion of issues related to graduate study in educational psychology and related fields.

**Credit hours:** 1

**Contact hours:** Contact: 1 Other: 1

**Levels:** Graduate

**Schedule types:** Discussion

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5103 Human Development in Psychology**

**Description:** Introduction to basic research and theories of cognitive, emotional and social development. Applications to educational and family settings. Course previously offered as ABSE 5103.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5123 Academic Writing in the Learning Sciences**

**Description:** Introduction to the structure and organization of academic writing appropriate for a Creative Component, project, thesis, or doctoral dissertation. Students will be expected to prepare a proposal for their special topic.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5320 Seminar in Educational Psychology**

**Description:** In-depth exploration of contemporary topics in educational psychology. Offered for variable credit, 3-9 credit hours, maximum of 9 credit hours.

**Credit hours:** 3-9

**Contact hours:** Contact: 3-9 Other: 3-9

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5403 Issues in Adolescent Development**

**Description:** Current issues in adolescent development in an educational context and culture, including self, family, peers, school and work relationships. Gender differences within culture, race and class examined. Current dilemmas explored using critical theory and action research.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5463 Psychology of Learning**

**Description:** Evaluation of, and application to, education, psychology, and other learning contexts of research-based, contemporary psychological theories of human learning. Course previously offered as ABSE 5463.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5473 Psychology of Adult Learning**

**Description:** Analysis of the psychological foundation of adult learning both in and out of learning programs across the lifespan. Differentiates among adults of all ages in terms of practice and performance in a variety of settings, including classroom, community, and work environments. Examines the intellectual, social, cultural, emotional, motivational, and performance components of the psychology of adult learning.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5553 Motivation in Educational Contexts**

**Description:** An overview of empirically informed theories of motivation from a psychological perspective with emphasis on contextual influences in and outside the classroom. Topics include beliefs about ability and intelligence, goals, casual attributions, the value of academic tasks, and psychological needs.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5603 Developmental Issues in Instruction**

**Prerequisites:** Three hours in developmental psychology, educational psychology or consent of instructor.

**Description:** Developmental issues in instruction at all levels from early childhood through adulthood. Specific impacts of developmental stages on the acquisition and retention of cognitive, affective and psychomotor development at various levels and contexts will be examined and applications to instruction will be provided.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5663 Creativity for Teachers**

**Description:** Theoretical origins of creativity and their concomitant applications in the learning environment. Blocks to creative thinking, imagination, imagery, creativity testing, developing ideas and innovations, creative problem solving and teaching techniques and methods to maximize creative potential in all kinds and types of students. Course previously offered as ABSE 5663.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5713 Transpersonal Human Development**

**Description:** Human development in terms of individual consciousness, focusing on the implications of such extraordinary states of consciousness as those associated with hallucinogenic drugs and mystical religious experience. Integration of psychological and religious interpretations of development. Applications to practical problems in education and psychology. Course previously offered as ABSE 5713.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5720 Educational and School Psychology Workshop**

**Description:** Workshop on various topics related to educational and school psychology. Offered for variable credit, 1-9 credit hours, maximum of 9 credit hours.

**Credit hours:** 1-9

**Contact hours:** Contact: 1-9 Other: 1-9

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5773 Individual Intellectual Assessment**

**Description:** Intensive study of various intelligence and achievement batteries, including the Wechsler scales and the Woodcock Johnson Tests of Achievement. Emphasis and practice in administration, scoring, interpretation. Further emphasis on issues related to report writing, non-discriminatory assessment, and the history of intelligence testing.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5963 Developing Resources to Support Educational Programs**

**Description:** Development, management and evaluation of programs in intra- and extra-class settings. Program types include parent, volunteer, mentor, tutor, group sponsors in technology, business involvement, curricular enhancement and service learning. Developing community and business interest through public relations, financial development, grantsmanship or resource information sources. Developing Internet resources to support learners. Course previously offered as EPSY 5962.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 5983 Instructional Effectiveness in Higher Education**

**Prerequisites:** Graduate standing or consent of instructor.

**Description:** For teaching assistants in all areas. The many aspects of teaching in higher education. Both theory, e.g., traditional instructional design and practical applications, e.g., how to create a lecture. Issues related to instructional design, development of classroom climate, understanding and assessment of students, classroom practices, materials creation for teaching and development of support systems.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6000 Doctoral Dissertation**

**Prerequisites:** Consent of advisory committee chairperson.

**Description:** Report of research conducted by a student in the doctoral program in educational school psychology. Credit given and grade assigned upon completion and acceptance of the doctoral thesis. Offered for variable credit, 1-25 credit hours, maximum of 25 credit hours.

**Credit hours:** 1-25

**Contact hours:** Contact: 1-25 Other: 1-25

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6001 Colloquium II: The Job Search in Educational Psychology and Related Fields**

**Description:** Discussion of issues related to the job search process in educational psychology and related fields.

**Credit hours:** 1

**Contact hours:** Contact: 1 Other: 1

**Levels:** Graduate

**Schedule types:** Discussion

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6043 Adult Development**

**Description:** Theory and research concerning human development during the adult years. Practical applications for serving adult populations in education and education-related settings. Course previously offered as ABSE 6043.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6110 Seminar in School Psychology**

**Description:** An assessment of psychological techniques applied to problems encountered in the internship. Course previously offered as ABSE 6110. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6153 Advanced Research in Educational Psychology**

**Description:** Research in educational psychology in areas such as recent trends in the field, exploration of research designs in Educational Psychology, writing and dissemination of research, ethics and collaboration, and development of skills to be competent consumers of the literature.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6163 Emotion and Cognition**

**Description:** The relationship between emotion and cognition as it relates to knowing and learning. History, wisdom and the interdependence of affect and cognition, the effects of mood on memory, emotion in feminist epistemology, the role of feeling in the writing process, intuition, and narrative thought. Exploration of potential research. Course previously offered as ABSE 6163.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6213 Advanced Educational Psychology**

**Prerequisites:** Three hours in developmental psychology or consent of instructor.

**Description:** Learning and its effect upon coping and adjustment. How learning, environmental and personality factors interact to change human behavior. Course previously offered as EPSY 5213.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6323 Psychological Consultation**

**Prerequisites:** Admission to graduate program in the SAHEP or psychology program.

**Description:** Models and strategies for the delivery of special services in the schools and other agencies that focus on serving the mental health needs of children, adolescents and adults. The use of consultation as a problem solving alternative to the assessment/label approach. Same course as CPSY 6323, students can receive credit in only one of the courses. Course previously offered as ABSE 6323.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6443 Theories and Problems in Educational Psychology**

**Prerequisites:** Admission to the doctoral program in educational psychology or consent of instructor.

**Description:** Theoretical foundations and nature of the problems studied in educational psychology; current issues and historical overview.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6460 Internship in Educational Psychology**

**Prerequisites:** Consent of instructor.

**Description:** May be repeated for credit when work assignment varies. Required of all teaching assistants in educational psychology during the first semester of each new teaching assignment. Includes cooperative planning and evaluation. Course previously offered as ABSE 6460. Offered for variable credit, 1-9 credit hours, maximum of 9 credit hours.

**Credit hours:** 1-9

**Contact hours:** Contact: 1-9 Other: 1-9

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6533 Human Motivation**

**Description:** A theoretically-oriented approach to the concept of motivation; essential precursors to human behavior and applications to the solution of real and hypothetical problems. Course previously offered as ABSE 6533.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6850 Directed Readings in Educational and School Psychology**

**Prerequisites:** Consent of instructor.

**Description:** Directed reading for students with advanced graduate standing in educational and school psychology. Course previously offered as ABSE 6850. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**EPSY 6880 Internship in Education**

**Prerequisites:** Admission to advanced graduate program and consent of area coordinator.

**Description:** Directed off-campus experiences designed to relate ideas and concepts to problems encountered in the management of the school program. Course previously offered as ABSE 6880. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**FDEP 5183 Theories of Social Psychology**

**Prerequisites:** Permission of instructor.

**Description:** History, theories, and empirical findings regarding the interactions between individual and group functioning. Previously offered as EPSY 5183.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**FDEP 5493 Psychology of Learning and Behavior**

**Description:** An introduction to the psychology of learning and behavior. Examination of the principles of Classical and Operant conditioning and integration of these and other learning theories into applied settings.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**FDEP 6123 Biological Bases of Behavior**

**Description:** A study of the physiological basis for behavior. A survey of neurophysiology with emphasis placed upon sensory and motor processes, and the effect which emotion and motivation have upon the organization of behavior.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**FDEP 6133 History and Systems of Psychology**

**Description:** History and systems of psychology related to contemporary applied psychology. Previously offered as EPSY 6133.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science



**GTED 5063 Introduction to Gifted and Talented Education**

**Description:** Concepts, techniques, and strategies for providing differentiated educational programs and experiences for the gifted and talented. State and Federal legislation; development of gifts and talents; program types; identification systems; program development; materials development; teaching techniques and methodologies. Previously offered as EPSY 5063.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**GTED 5163 Counseling Techniques for Teachers of Gifted and Talented Students**

**Description:** Techniques for dealing with the conflicts experienced by gifted and talented students. Strategies for consulting with teachers, peers, and parents regarding optimal development of gifted. Peer counseling techniques, dealing with self-concept, social and emotional concerns, problem solving and decision making, referral procedures and self-analysis for teachers related to learning and teaching philosophy and style. Previously offered as EPSY 5163.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**GTED 5363 Differentiating Curriculum for Gifted Learners**

**Description:** Development of curriculum for horizontal and vertical expansion and acceleration. Commercial and teacher prepared materials in imagination; imagery; analogy; metaphor; inductive, deductive and abductive thinking; sciencing; philosophy; logic systems; problem solving; psychology; concept learning; creativity; creative dramatics, etc. Conceptual approaches to the use of the preceding in various interest based and non-interest based curricular formats. Previously offered as EPSY 5363.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**GTED 5620 Practicum with Exceptional Learners**

**Description:** Supervised individual and group experience with exceptional learners. The particular experience (learning disability, mental retardation, gifted, etc.) is determined by the student's field of specialization. Previously offered as EPSY 5620. Offered for variable credit, 1-6 credit hours, maximum of 8 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**GTED 5763 Teaching Methods and Techniques for Gifted Education**

**Description:** Development of curriculum for horizontal and vertical expansion and acceleration. Commercial and teacher prepared materials in imagination; imagery, analogy, metaphor; inductive, deductive and abductive thinking; sciencing; philosophy; logic systems; problem solving; psychology; concept learning; creativity; creative dramatics, etc. Conceptual approaches to the use of the preceding in various interest based and non-interest based curricular formats. Previously offered as EPSY 5763.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**GTED 5863 Developing Programs for the Gifted and Talented**

**Description:** Programs based on various philosophies and structural concepts of gifted and talented education, e.g., inclusion, self-contained, pullouts, magnet schools, time blocking, acceleration and enrichment. Programs designed for general and specific academic ability; however, exposure will be provided to creative and productive thinking programs, leadership programs, and visual and performing arts programs. Specific models included. Previously offered as EPSY 5863.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**GTED 5993 Identification and Behavioral Characteristics of the Gifted and Talented**

**Description:** Cognitive, affective, and behavioral characteristics of the gifted and talented. Selections of tests and interest inventories. Selection and/or developing of nomination/recommendation forms/models, inventories, checklists, rating scales, sociograms as well as data abstraction from cumulative and anecdotal records. Functions of gifted/talented identification committees. Previously offered as EPSY 5993.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 2003 American Stories: Diverse Peoples in YA Literature (DH)**

**Description:** Explores young adult literature representations of diverse peoples in America. Students examine historical and contemporary representations of diverse social and cultural groups through a variety of critical, analytical lenses such as literary or formal analysis, anti-bias antiracist/critical literacy, disability studies lens, genetic/historical criticism, and queer reading of young adult literature. Requires reading, discussion, and written analysis of young adult literature.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**General Education and other Course Attributes:** Diversity, Human Heritage & Cultures

**LLCE 6060 Special Topics in Language, Literacy & Culture Education**

**Description:** Seminar on special topics in language, literacy, and culture education. Course topics will differ depending on current interests and issues in the field.

**Credit hours:** 1-6

**Contact hours:** Lecture: 1-6 Contact: 1-6

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6083 Seminar in Writing Pedagogy**

**Prerequisites:** Graduate standing with Graduate College.

**Description:** Seminal works in theory and research related to the teaching of writing in K-16 settings are examined. Students will examine the scholarship on genre theories, writing process theory, and writing pedagogy, considering the practical classroom implications and applications for this work. This course relies on reading, discussion, synthesis of key concepts, and individual inquiry as central learning processes. Previously offered as CIED 6083.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6093 English Language Learners: Theory, Research, Policy and Practice**

**Description:** History, theory, research, policy and practice of teaching English Language Learners and Emergent Multilingual students in PK-12 settings. Emphasis is placed on the critical pedagogical and theoretical aspects of teaching ELL, research and policy, as well as how assessments are used for the identification and placement of ELL students. Previously offered as CIED 6093.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6183 Colloquium in Cultural Studies**

**Prerequisites:** Graduate standing. For those in education, recommend SCFD 6113 and SCFD 6983.

**Description:** The study of culture and the problematics of culture beyond national boundaries and disciplinary divisions through interdisciplinary and post-disciplinary lenses in, but not limited to, the context of language and multiliteracies.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6193 21st Century Literacies: Theory, Research, and Practice**

**Description:** Theory and research on new literacies for the 21st Century including digital literacies, multimodalities, multi-literacies, participatory culture, and popular culture, considering the implications and applications for K-20 classroom. Previously offered as CIED 6193.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6213 Observing and Responding to Young Readers in Reading Recovery**

**Description:** Understanding the complex role of teacher leaders as they teach children and participate in the training of Reading Recovery teachers in the field. Develop role as a facilitator and problem solver in the implementation of Reading Recovery within school systems. Interaction with other teacher leaders and the University trainer at multiple training sites to broaden and deepen understanding of how to support and facilitate teachers' growth and development.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6223 Theoretical Foundations in Early Literacy and Reading Recovery**

**Description:** Introduction to underlying theories that contribute to early reading and writing. Critical understandings include the role of systematic observation of oral and written language and the relationship of oral language acquisition to early school literacy. A history of research in literacy processes that contribute to the foundations of Reading Recovery will be explored. (The course is the first course in the two-semester theory requirement for Reading Recovery teacher-leaders and trainers in training.)

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6233 Reading Recovery Teacher Leadership**

**Description:** Participants in this course will construct an understanding of the complex role of teacher leaders as they teach children and participate in the training of Reading Recovery teachers in the field. They will also acquire skills in fulfilling their role as a facilitator and problem solver in the implementation of Reading Recovery within school systems. They will interact with other teacher leaders and the University trainer at multiple training sites to broaden and deepen their understanding of how to support and facilitate teachers' growth and development.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6243 Early Literacy Intervention in Reading Recovery**

**Description:** This course focuses on the procedures for working with emerging at-risk readers and writers. The course content is based on strategies children need to be independent readers & writers. Course content and presentation reflect a highly-theoretical teacher decision making model based on actual observation of teacher-child interactions.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6253 Advanced Theoretical Foundations of Early Literacy and Reading Recovery**

**Description:** A course for Reading Recovery teacher leaders-in-training focusing on the underlying theories of early literacy acquisition (including processes related to reading, writing, and oral language) and the underlying theories of prevention of reading difficulties through early intervention.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6263 Advanced Reading Recovery Teacher Leadership**

**Description:** This course involves the application of expertise in early literacy and early intervention leadership. Teacher leaders-in-training will participate in the implementation of early literacy teacher courses and early intervention in schools and systems, teach adult learners, and learn to use data to refine and evaluate implementation. Field work is required.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6513 Staff Development in Literacy Education**

**Description:** Design and delivery of research related to staff development experiences in literacy. Previously offered as CIED 5510 and CIED 6513.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6653 Issues and Trends in Adolescent Literacy**

**Description:** This course addresses current issues and trends in adolescent literacy education including theory, research, and practice. Previously offered as CIED 6653.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6673 Theory and Research on Teaching Contemporary Children's and YA Literature**

**Description:** Theory and research related to teaching literacy through and with Contemporary Children's Adolescent, and Young Adult Literature. Previously offered as CIED 6673.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**LLCE 6683 Language, Literacy and Culture**

**Description:** The social-cultural perspectives related to the role of language in mediating literate behaviors, cognition and action in learning contexts. Aspects of language use within various learning contexts (situated cognition) and its academic, technical and everyday discourse in understanding the interrelationships among teaching, learning, knowledge and culture. Previously offered as CIED 6684 and CIED 6683.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 1012 Inquiry Approaches to Teaching**

**Prerequisites:** Interest in exploring teaching as a career.

**Description:** Master teachers introduce students to examples of high-quality inquiry-based lessons and model the educational concepts to which they are being introduced. Students prepare and participate in the teaching of multiple lessons in elementary classrooms. Previously offered as SMED 1011.

**Credit hours:** 2

**Contact hours:** Lecture: 1 Lab: 2 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Clinical, Lecture, Lecture Clinical

**Department/School:** Teaching, Learning, Ed Science

**SMED 1103 Teaching Science through Standards-Based Practices: Earth and Space Science**

**Description:** Explores pedagogical strategies for the teaching and learning of Earth and space science systems. Students develop pedagogical content knowledge and will demonstrate a deep understanding of active investigations in the principles of Earth and space science systems. Course focuses on best pedagogical practices, formative assessments, and common student misconceptions.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 2011 Inquiry-Based Lesson Design-Step 2**

**Prerequisites:** SMED 1011 and an interest in exploring teaching as a career.

**Description:** Master teachers introduce students to examples of high-quality inquiry-based lessons and model the educational concepts to which they are being introduced. In Step 2, students prepare and participate in the teaching of three (3) lessons in middle school classrooms.

**Credit hours:** 1

**Contact hours:** Lab: 2 Contact: 2

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 2100 Seminar in Mathematics Education**

**Description:** This course provides students with exposure to topics of interest in the Mathematics Education field. Seminar topics will differ depending on current interests and topics in the field. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Lecture: 1-6 Contact: 1-6

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 2153 Teaching Algebra, Data and Probability Across the Elementary Curriculum**

**Description:** Explores underlying concepts and pedagogical strategies for teaching algebra, data, and probability. Best pedagogical practices, formative assessment and common student misconceptions will be focused around all topics.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 2200 Seminar in Science Education**

**Description:** This course provides students with exposure to topics of interest in the Science Education field. Seminar topics will differ depending on current interests and topics in the field. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Lecture: 1-6 Contact: 1-6

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 3013 Knowing and Learning in Mathematics and Science**

**Prerequisites:** SMED 1011 and SMED 2011.

**Description:** Expands the prospective teacher's understanding of current theories of learning and conceptual development. Students examine their own assumptions about learning and critically examine the needs of a diverse student population in the classroom.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 3100 Workshop In Mathematics Education**

**Description:** This course provides students with exposure to a specific topic of interest in the Mathematics Education field. Workshop topics will differ depending on current interests and topics in the field. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Lecture: 1-6 Contact: 1-6

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 3153 Teaching Mathematics at the Primary Level**

**Prerequisites:** Grade of "C" or better in: MATH 3603; six hours from MATH 1483, MATH 1493, MATH 1513, MATH 1613, MATH 2103, MATH 2144, SMED 2153 or STAT 2013; consent of instructor.

**Description:** Developmental levels in selection and organization of content and procedures for primary mathematics education. Same course as CIED 3153. Cannot be used for degree credit with SMED 5013.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 3200 Workshop in Science Education**

**Description:** This course provides students with exposure to a specific topic of interest in the Science Education field. Workshop topics will differ depending on current interests and topics in the field. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Lecture: 1-6 Contact: 1-6

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 4003 Teaching Fundamental Concepts of Mathematics**

**Prerequisites:** Full admission to Professional Education.

**Description:** Teaching of the basic skill areas. Study and comparison of contemporary basic mathematics textbooks. Recommended to be taken concurrently with public school practicum experiences. Course previously offered as CIED 4003. May not be used for degree credit with SMED 5003.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 4013 Classroom Interactions**

**Prerequisites:** SMED 1011, SMED 2011, SMED 3013

**Description:** A close examination of the interplay between teachers, students, and content, and how such interactions enable students to develop deep conceptual understanding. Students will learn how content and pedagogy combine to create effective teaching.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 4023 Problem-Based Learning in Mathematics and Science**

**Prerequisites:** SMED 1011, SMED 2011, SMED 3013, SMED 4013, CIED 4613 or CIED 4003, and full admission to Professional Education.

**Description:** Explores authentic, important, and meaningful questions of real concern to students. Students will work in teams to formulate questions, make predictions, design investigations, collect and analyze data, make products and share ideas.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Clinical, Lecture, Lecture Clinical

**Department/School:** Teaching, Learning, Ed Science

**SMED 4053 Teaching Geometry in the Secondary School**

**Prerequisites:** Full admission to Professional Education.

**Description:** Overview of the present secondary geometry curricula and future trends. Axiomatic development of Euclidean geometry, proofs and transformational geometry from the perspective of the secondary mathematics teachers. Study and comparison of contemporary basic mathematics textbooks. Recommended to be taken after or concurrently with MATH 4403. Course previously offered as CIED 4053. May not be used for degree credit with SMED 5053.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 4153 Teaching Mathematics at the Intermediate Level**

**Prerequisites:** SMED 3153 or SMED 5013 (for Graduate Students) and MATH 3403 and MATH 3603, full admission to Professional Education.

**Description:** Selection and organization of content, procedures for instruction, and evaluation of outcomes in teaching the mathematics of the intermediate grades. Some attention to instruction in upper grades of the elementary school. Course previously offered as CIED 4153. May not be used for degree credit with SMED 5103.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 4353 Science in the Elementary School Curriculum**

**Prerequisites:** Completion of 12 hours with a grade of "C" or better in required science courses and be fully admitted to Professional Education.

**Description:** The purposes, selection and organization of content, teaching and learning procedures and evaluation of outcomes in elementary school science. Course previously offered as CIED 4353.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 4560 Environmental Education**

**Description:** Development of (teacher/leader) competencies in the content, methods, philosophy, and historical perspective of contemporary environmental education curricula using both indoor and outdoor settings as a multidisciplinary learning laboratory. Same course as CIED 5730.

Course previously offered as CIED 4560. May not be used for degree credit with SMED 5560. Offered for variable credit, 1-4 credit hours, maximum of 4 credit hours.

**Credit hours:** 1-4

**Contact hours:** Lecture: 1-4 Contact: 1-4

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 4611 Authentic Research in the Science Classroom**

**Prerequisites:** SMED 1011; SMED 2011; SMED 3013; SMED 4013; and concurrent enrollment in SMED 4613.

**Description:** This course is designed to strengthen pre-service science teachers' understanding of how scientific knowledge is generated by engaging in an authentic research experience under the mentorship of a STEM mentor. Students will also learn how to write a scientific manuscript.

**Credit hours:** 1

**Contact hours:** Lab: 2 Contact: 2

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 4613 Teaching the Nature of Science Through an Inquiry Approach**

**Prerequisites:** Full admission to professional education.

**Description:** This course is designed to assist pre-service science teachers in developing skills to teach science through an inquiry approach. Guided readings, discussions, group activities, and classroom field experiences, will focus on strengthening views on the nature of science. Course previously offered as CIED 4613. May not be used for degree credit with SMED 5203.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 4713 Teaching and Learning Science in the Secondary School**

**Prerequisites:** CIED 4613, and full admission to Professional Education.

**Description:** Assists students in developing safe classroom practices, science curriculum, and educational assessments supported by teaching and learning theories. Weekly classroom field experiences are required. Must be taken the semester prior to student teaching/internship. May not be used for degree credit with SMED 5713.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 4723 Senior Seminar in Secondary Mathematics and Science Education**

**Prerequisites:** SMED 1011, SMED 2011, SMED 3013, SMED 4013, SMED 4023, CIED 4613 or CIED 4003, and CIED 4713 or CIED 4053, and full admission to Professional Education.

**Description:** Explores classroom management and discipline approaches as well as teacher research, parental involvement, school climate and community relations. May not be used for degree credit with SMED 5723.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 4813 Yellowstone Science for Educators (N)**

**Description:** Explore the science of the Greater Yellowstone Area (GYA). This course focuses on the systematic study of natural processes and mechanisms associated with the GYA. Emphasis is placed on the biological and physical (chemistry, earth, and physics) science concepts that have formed the parks that exist today. Consequences of human intervention are addressed. Applications of science content to K-12 classroom curricula are addressed. Required field trip to the GYA.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**General Education and other Course Attributes:** Natural Science Reasoning



**SMED 5003 Teaching Fundamental Concepts of Mathematics****Prerequisites:** Full admission to Professional Education.**Description:** Teaching of the basic skill areas. Study and comparison of contemporary basic mathematics textbooks. Recommended to be taken concurrently with public school practicum experiences. May not be used for degree credit with SMED 4003.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**SMED 5013 Mathematics Education: Theory and Practice(Grade 1-4)****Prerequisites:** MATH 3403 and MATH 3603, Admission to MAT, Full admission to Professional Education.**Description:** Curriculum, materials, methods, and procedures related to the theory and practices of teaching mathematics in grades 1-4. Meets with SMED 3153. No degree credit for those with credit in SMED 3153.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Graduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Teaching, Learning, Ed Science**SMED 5050 Seminar in Integrated Mathematics and Science Applications****Description:** Seminar topics may differ depending upon the nature of current interests and topics in mathematics and science education. Course previously offered as CIED 5050. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.**Credit hours:** 1-6**Contact hours:** Lecture: 1-6 Contact: 1-6**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**SMED 5053 Teaching Geometry in the Secondary School****Prerequisites:** Full admission to Professional Education.**Description:** Overview of the present secondary geometry curricula and future trends. Axiomatic development of Euclidean geometry, proofs and transformational geometry from the perspective of the secondary mathematics teachers. Study and comparison of contemporary basic mathematics textbooks. Recommended to be taken after or concurrently with MATH 4403. May not be used for degree credit with SMED 4053.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**SMED 5083 Teaching Science in the Elementary School (Grades 1-8)****Description:** Curriculum, materials, methods, and procedures related to the theory and practice of science teaching in grades 1-8. Course previously offered as CIED 5083.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**SMED 5103 Teaching Mathematics at the Intermediate Level****Description:** Selection and organization of content procedures for instruction, and evaluation of outcomes in teaching the mathematics of the intermediate grades. Some attention to instruction in upper grades of the elementary school. May not be used for degree credit with SMED 4153.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**SMED 5113 Knowing and Learning in Mathematics and Science****Prerequisites:** Admission to MAT program or consent of instructor.**Description:** Expands the prospective teacher's understanding of current theories of learning and conceptual development. Students examine their own assumptions about learning and what it means to teach. They critically examine the needs of a diverse student population in the classroom. Meets with SMED 3013. No degree credit for those with credit in SMED 3013.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**SMED 5123 Classroom Interactions in Mathematics and Science****Prerequisites:** SMED 5113 and Admission to MAT program or consent of instructor.**Description:** A close examination of the interplay between teachers, students, and content, and how such interactions enable students to develop deep conceptual understanding. Students will learn how content and pedagogy combine to make effective teaching. Includes a school-based field experience. Meets with SMED 4013. No degree credit for those with credit in SMED 4013.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science**SMED 5133 Problem-Based Learning in Mathematics and Science****Prerequisites:** SMED 5113 and Admission to MAT program or consent of instructor.**Description:** Explores authentic, important, and meaningful questions of real concern to students. Students will work in teams to formulate questions, make predictions, design investigations, collect and analyze data, make products and share ideas. Includes a school-based field experience. Meets with SMED 4023. No degree credit for those with credit in SMED 4023.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Teaching, Learning, Ed Science

**SMED 5143 Methods for Teaching Secondary Science**

**Prerequisites:** Admission into the Secondary Teaching Graduate Certificate Program or permission of instructor.

**Description:** Examines current trends and issues in secondary school science. The major focus is to provide an overview of instructional strategies, assessment techniques, and curriculum development. Course is required in the Secondary Education Graduate Certificate Program.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5153 Methods for Teaching Secondary Math**

**Prerequisites:** Admission into the Graduate Certificate for Effective Teaching in the Secondary Schools program or permission of instructor.

**Description:** Examines current trends and issues in secondary school mathematics. The major focus is to provide an overview of instructional strategies, assessment techniques, and curriculum development. Course is required in the Graduate Certificate for Effective Teaching in the Secondary Schools program.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5183 Social Justice by the Numbers: Learning to Teach Science & Math for Understanding & Equity**

**Description:** This course explores principles of social justice in education as a lens for rethinking school mathematics and science.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5193 Inquiry and Problem-Based Learning in Science Education**

**Prerequisites:** Completion of Bachelor's degree.

**Description:** Different aspects of teaching science through inquiry methods. Using current research as a guide, students will define scientific inquiry teaching and learning, explore assessing inquiry, and evaluate the roles of students, teachers, and discourse in the science classroom.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5203 Teaching the Nature of Science Through and Inquiry Approach**

**Prerequisites:** Full admission to professional education.

**Description:** This course is designed to assist pre-service science teachers in developing skills to teach science through an inquiry approach. Guided readings, discussions, group activities, and classroom field experiences, will focus on strengthening views on the nature of science. May not be used for degree credit with SMED 4613.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5223 Teaching Science in the Schools**

**Description:** Materials, methods and classroom procedures related to science in grades K-12. Course previously offered as CIED 5223.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5243 Environmental Education in the Curriculum**

**Description:** Integration of environmental concepts in the total school curriculum. Review of P-12 environmental education curricula and methods of teaching environmental education in formal and nonformal settings. Course previously offered as CIED 5243.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5253 Teaching Rational Number Concepts, Proportional Reasoning, and Classroom Interactions**

**Prerequisites:** Completion of a Bachelor's degree.

**Description:** Focus on teaching rational number concepts and developing proportional reasoning skills; attention given to learning methods which facilitate appropriate classroom interactions.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5263 Assessment and Evaluation in School Mathematics**

**Description:** Focus on classroom assessment to help teachers identify what students know about critical mathematics concepts, skills, procedures, and facts. Emphasis would be on using that information to inform their instructional decisions and enhance student learning. Course previously offered as CIED 5263.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5270 Practicum in School Mathematics**

**Description:** Diagnostic and therapeutic procedures in mathematics with students of all ages. Laboratory classes provide for clinical experiences in evaluation and instruction with children experiencing difficulty in mathematics. Course previously offered as CIED 5270. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**SMED 5273 Number Concepts and Assessment at the Elementary Level (PK-6)**

**Description:** Analysis and construction of effective mathematical tasks in teaching number systems and operations at the PK-6 level; attention is also given to the expansion of content knowledge and issues related to assessment. Course previously offered as CIED 5273.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5280 Workshop in Science Education**

**Description:** Explores topics in science education, including developing, and/or implementing elementary and/or secondary science programming. Course previously offered as CIED 5280. Offered for variable credit, 1-8 credit hours, maximum of 8 credit hours.

**Credit hours:** 1-8

**Contact hours:** Lecture: 1-8 Contact: 1-8

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5283 Problem-Centered Learning in Mathematics**

**Description:** Focus on the different aspects of a problem-centered learning environment. Using current research as a guide, students will examine tasks, collaborative work, and the roles of students, teachers and discourse. Course previously offered as CIED 5283.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5293 Teaching and Learning Mathematics in Technology**

**Description:** The focus of this course is on research and methods of teaching and learning with technology in the mathematics classroom. Topics will include philosophical, social, developmental and theoretical issues associated with the development and use of technology and school reform. Activities and applications will be explored as they relate to the potential for providing a technology-rich learning environment conducive to student construction of mathematical knowledge. Course previously offered as CIED 5293.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5313 Introduction to K-12 Engineering Education**

**Prerequisites:** Completion of a Bachelors Degree.

**Description:** Involves the study of engineering education topics within the K-12 setting, which includes exploring current related literature as well as the implementation of the engineering design process.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5323 Technology for the K-12 STEM Educator**

**Prerequisites:** Completion of a Bachelor's Degree.

**Description:** Survey of current innovative technologies for K-12 STEM classrooms.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5333 Developing Informal and Formal STEM Programs in Schools**

**Prerequisites:** Completion of a Bachelor's Degree.

**Description:** Examines the areas of Science, Technology, Engineering, and Mathematics (STEM) that relate to curriculum development, instruction practices and leadership integration in schools and districts. Students will gain knowledge and skills to support STEM infusion throughout formal and informal environments.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5560 Environmental Education**

**Description:** Development of (teacher/leader) competencies in the content, methods, philosophy, and historical perspective of contemporary environmental education curricula using both indoor and outdoor settings as a multidisciplinary learning laboratory. May not be used for degree credit with SMED 4560. Offered for variable credit, 1-4 credit hours, maximum of 4 credit hours.

**Credit hours:** 1-4

**Contact hours:** Lecture: 1-4 Contact: 1-4

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5613 Effective Teaching of Mathematics in the Secondary School**

**Prerequisites:** Consent of instructor.

**Description:** Directed advanced practicum in secondary school mathematical education. Includes study of current research findings in mathematical education, teaching strategies, materials and evaluation procedures in the secondary school. For experienced classroom teachers, superintendents, principals and supervisors. Course previously offered as CIED 5613.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5713 Teaching and Learning Science in the Secondary School**

**Prerequisites:** Full admission to Professional Education.

**Description:** This course is designed to assist preservice science teachers in developing skills to teach science through an inquiry approach. The three components of science literacy: science content knowledge, practices of science, and nature of science are taught throughout the lens of a mentored science research apprenticeship. May not be used for degree credit with SMED 4713.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Graduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**SMED 5723 Senior Seminar in the Secondary Mathematics and Science Education**

**Description:** Explores classroom management and discipline approaches as well as teacher research, parental involvement, school climate and community relations. May not be used for degree credit with SMED 4723.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5750 Seminar in Mathematics Education**

**Prerequisites:** Consent of instructor.

**Description:** Problems, issues and trends in mathematics education. Course previously offered as CIED 5750. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Lecture: 1-6 Contact: 1-6

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5813 Assessment in Science Education**

**Prerequisites:** Completion of a Bachelor's degree.

**Description:** Guided readings, discussions, and group activities focus on strengthening students' understanding of state and national assessments in science education. Previously offered as SMED 6013.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5913 Teaching Geometry and Spatial Visualization**

**Prerequisites:** Completion of a Bachelor's degree.

**Description:** Focus on the development of geometric concepts and spatial visualization. Attention given to the understanding of learning trajectories and their role in student learning. Course previously offered as CIED 5913.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5923 Teaching Algebra and Mathematical Tasks**

**Prerequisites:** Completion of a Bachelor's degree.

**Description:** Focus on algebra concepts of functional thinking and generalized arithmetic. Attention will be given to the analysis and construction of effective mathematical tasks in the teaching of algebra. Course previously offered as CIED 5923.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5933 Teaching Data and Probability in Schools**

**Prerequisites:** Completion of a Bachelor's degree.

**Description:** Focus on statistical literacy and the teaching of PK-12 data and probability concepts; emphasis on the use of instructional technology to enhance student learning.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 5943 Mathematics Leadership and Coaching**

**Prerequisites:** Completion of a Bachelor's degree and nine hours from SMED 5253, SMED 5273, SMED 5913, SMED 5923, and SMED 5933.

**Description:** Develops skills and knowledge for school mathematics program design and leadership, and for coaching other teaching professionals in mathematics teaching. Course previously offered as CIED 5943.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 6123 Teaching the Nature of Science in Secondary Science Education**

**Prerequisites:** Successful completion of a bachelor's degree.

**Description:** Guided readings, discussions, and group activities focus on strengthening views on the nature of science. Course previously offered as CIED 6123.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 6223 Instruction and Learning in Science and Mathematics Education**

**Prerequisites:** Acceptance into a doctoral program.

**Description:** Focus on learning and teaching in science and mathematics education contexts. Students will analyze and synthesize research in science and mathematics education that are related to the learning sciences. Course previously offered as CIED 6223.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 6233 Affective Issues in Teaching Mathematics and Sciences**

**Prerequisites:** Bachelor's Degree

**Description:** Explores current affective issues that influence the teaching and learning of mathematics and science. Students will explore topics such as beliefs, attitudes, emotions, motivation, efficacy, identity, and anxiety.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SMED 6753 Research in Mathematics and Science Education**

**Description:** The examination of current research in mathematics and science teaching and learning, research designs, and the generation of new hypotheses. Course previously offered as CIED 6750 and SMED 6750.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 3202 Educating Exceptional Learners**

**Description:** Learning characteristics, needs and problems of educating the exceptional learner in the public schools. Implications of the learning, environmental and cultural characteristics; planning and program assistance available for accommodating the exceptional learner in regular and special education programs; observation of exceptional learners. Previously offered as ABSE 3202.

**Credit hours:** 2

**Contact hours:** Lecture: 1 Lab: 2 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Teaching, Learning, Ed Science

**SPED 3623 Characteristics of Students with Mild/Moderate Disabilities**

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 3683 Models of Instruction in the Inclusive Classroom**

**Description:** Current techniques, models, and approaches used to teach students with mild-moderate disabilities and the theoretical bases for these techniques and approaches in inclusive classrooms will be presented. May not be used for degree credit with SPED 5683.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 3743 Planning, Compliance, and Current Practices in SPED**

**Prerequisites:** SPED 3202 Teaching Exception Children.

**Description:** Examination of current and past policies and procedures that govern identification, referral, eligibility, and Individualized Education Programs of PK-12 students with disabilities. Current practices for planning and implementing instruction within a continuum of service delivery models. May not be used for degree credit with SPED 5743.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 4723 Transition Into Adulthood for Individuals with Disabilities**

**Description:** Strategies for preparing youth and young adults with disabilities for transitioning into adulthood. Previously offered as ABSE 4723. May not be used for degree credit with SPED 5723.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 4753 Multi-tiered Classroom and Behavior Management**

**Description:** Classroom and behavior management strategies designed to improve learning and behavior within instructional settings using multi-tiered systems of support. Previously offered as ABSE 4753.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5000 Master's Thesis**

**Description:** Previously offered as ABSE 5000. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**SPED 5123 Characteristics and Teaching Methods for Students with Autism Spectrum Disorders**

**Prerequisites:** Graduate standing or permission of instructor.

**Description:** Designed to provide a foundation for understanding educational and psychological theory and best practices used in teaching students with Autism Spectrum Disorders (ASD). Characteristics and diagnostic procedures of ASD will be introduced, as well as such teaching methods as incidental teaching, visual supports, workstations, discrete trial teaching, and social stories.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5150 Seminar in Special Education**

**Description:** Seminar topics will differ depending on interests and topics regarding Special Education. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Lecture: 1-6 Contact: 1-6

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5320 Seminar in Applied Behavioral Studies**

**Description:** In-depth exploration of contemporary problems of applied behavioral studies. Offered for variable credit, 1-24 credit hours, maximum of 24 credit hours.

**Credit hours:** 1-24

**Contact hours:** Lecture: 1-24 Contact: 1-24

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5573 Communication Strategies for Individuals with Severe and Profound Disabilities**

**Description:** Methods for communicating with severely or profoundly disabled persons and for facilitating their communication through speech, sign, assistive devices and technology.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science



**SPED 5620 Practicum with Exceptional Learners**

**Prerequisites:** Consent of instructor.

**Description:** Supervised individual and group experience with exceptional learners. The particular experience (learning disability, mental retardation, gifted, etc.) determined by the student's field of specialization. Offered for variable credit, 1-8 credit hours, maximum of 8 credit hours.

**Credit hours:** 1-8

**Contact hours:** Contact: 1-8 Other: 1-8

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**SPED 5623 Characteristics of Students with Mild/Moderate Disabilities**

**Description:** Educational, psychological and physiological characteristics of individuals with mild and moderate disabilities. Professional roles of the teacher, professional ethics, and assessment of children with disabilities.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5633 Behavior Characteristics of Exceptional Individuals**

**Description:** Individual differences and problems that exceptional individuals experience. Educational programs and resources available to assist administrators, teachers and parents in dealing with unique individual needs. Previously offered as ABSE 5633.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5643 Working with Families of Students with Diverse Needs**

**Description:** Aiding the classroom teacher and other professional personnel in the understanding of unique needs, cultural factors, and interpersonal relations involved in working with families of exceptional children and stakeholders. Previously offered as ABSE 5643.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5673 Improving Literacy Skills of Individuals with Disabilities**

**Description:** Normal language development and variations from norms demonstrated by exceptional learner. Assessment techniques and intervention strategies appropriate for exceptional infants and children; theoretical approaches to language training, formal and informal; assessment techniques and techniques for exceptional individuals. Previously offered as ABSE 5673.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5683 Models of Instruction in the Inclusive Classroom**

**Description:** Current techniques, models and approaches used to teach students with mild-moderate disabilities and the theoretical bases for these techniques and approaches in inclusive classrooms will be presented. Previously offered as ABSE 5683.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5723 Transition Into Adulthood for Individuals with Disabilities**

**Description:** Strategies for preparing youth and young adults with disabilities for transitioning into adulthood. May not be used for degree credit with SPED 4723.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5733 Teaching Strategies for Students with Physical and Health Disabilities**

**Prerequisites:** SPED 5523 and graduate student standing.

**Description:** Design and implementation of educational programs, collaboration with families and other professionals, and advocacy for students with disabilities. Previously offered as ABSE 5733.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5743 Planning, Compliance and Current Practices**

**Description:** Current practices for planning and implementing instruction within a continuum of service delivery models. Examination of current and past policies and procedures that govern identification, referral, eligibility, and individualized Education Programs of PK-12 students with disabilities.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5783 Assessing Students with Disabilities**

**Description:** The practice and practicality of the assessment process used in schools for students with disabilities.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5883 Classroom and Behavior Management**

**Description:** Classroom and behavior management strategies designed to improve learning and behavior within instructional settings. Previously offered as ABSE 5883.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 5993 Culturally Responsive Teaching in Special Education**

**Description:** Examination of the influence of ethnic, socioeconomic class, and gender factors on students with disabilities. Teaching attitudes and expectations, and curricular and instructional strategies for improving students' school performance.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 6000 Doctoral Thesis**

**Description:** Required of all candidates for doctorate in applied behavioral studies. Credit given upon completion and acceptance of thesis.

Previously offered as ABSE 6000. Offered for variable credit, 1-25 credit hours, maximum of 25 credit hours.

**Credit hours:** 1-25

**Contact hours:** Contact: 1-25 Other: 1-25

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**SPED 6183 Legal Aspects in Special Education**

**Description:** Familiarization and analysis of legal rights and responsibilities of students, educators, and administrators in special education; federal and state mandates, case law and recent legal developments affecting special education. Previously offered as ABSE 6183.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 6543 School and Interagency Collaboration**

**Prerequisites:** Graduate student status or instructor permission.

**Description:** An advanced course to examine models for interdisciplinary teamwork in the design, delivery and evaluation of services for students with disabilities and at risk. Both school-based and interagency collaborative services and strategies for communicating with multiple stakeholders are emphasized.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 6603 Current Trends and Issues in Special Education**

**Description:** Current research and literature regarding the education of exceptional children. Previously offered as ABSE 6603.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 6743 Single Subject Design in Special Education**

**Prerequisites:** Consent of instructor.

**Description:** Conduct research utilizing single subject and single case study design with emphasis on special education. Advanced procedures in single subject research methodology, including design strategies and experimental control are emphasized.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Teaching, Learning, Ed Science

**SPED 6850 Directed Reading**

**Prerequisites:** Consent of instructor.

**Description:** Directed reading for students with advanced graduate standing. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**SPED 6880 Internship in Education**

**Description:** Directed off-campus experiences designed to relate ideas and concepts to problems encountered in the management of the school program. Offered for variable credit, 1-8 credit hours, maximum of 8 credit hours.

**Credit hours:** 1-8

**Contact hours:** Contact: 1-8 Other: 1-8

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Teaching, Learning, Ed Science

**WAED 5000 Thesis or Report**

**Description:** Students studying for a master's degree may enroll for a total of two credit hours if they write a report or six hours if they write a thesis. Students working on a specialist's degree may earn a maximum of 10 hours credit. Previously offered as OCED 5000. Offered for variable credit, 2-10 credit hours, maximum of 10 credit hours.

**Credit hours:** 2-10

**Contact hours:** Contact: 2-10 Other: 2-10

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5010 Seminar**

**Description:** Graduate student seminars focusing on current and critical issues and common problems relevant to workforce and adult education. Previously offered as OCED 5010. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5013 Foundations and Characteristics of Adult Learning**

**Description:** Societal trends and issues which have influenced the development and current status of workforce and adult education. Learning patterns, interests and participation among adults in a variety of educational settings. Previously offered as HRAE 5213 and EDLE 5313.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5110 Career and Technical Information**

**Description:** New development in scientific and technical information and knowledge that are relevant to current career, technical and trade practices. May not be used for degree credit with CTED 4110. Offered for variable credit, 1-6 credit hours, maximum of 12 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5113 Principles of Leadership in Workforce Education**

**Description:** Principles and analysis of leadership in today's workforce education organizations and the effect of leadership practices on organizational climate and governance. Understanding today's labor market and the connection among education, government, and workforce development policy. Previously offered as OCED 5113.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5123 Administration & Evaluation of Workforce and Adult Education**

**Description:** Principles of effective planning, administration and evaluation of workforce and adult education settings. Techniques and strategies for designing, conducting, reporting, and applications of evaluations. Course previously offered as TIED 5223 and OCED 5123.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5133 Internationalism, Globalization and Workforce Education**

**Description:** Preparing a globally competitive workforce. Analysis of comparative international occupational/technical education systems, and critical issues in internationalism and globalization in workforce education development. Course previously offered as OAED 5133 and OCED 5133.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5143 Organization and Administration of Adult Education**

**Description:** Organizational procedures and administrative practices for effective planning, implementation and management of adult and continuing education programs. Analyses of legislation, finances and community groups that influence and impact upon adult and continuing education programs. Previously offered as HRAE 5223.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5153 Curriculum Planning in Workforce and Adult Education**

**Description:** Principles and procedures for curriculum planning, development and management in workforce and adult education with analyses of current trends and practices and their implications for program quality. Course previously offered as OAED 5153 and OCED 5153.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5163 Instructional Procedures in Career and Technical Education**

**Description:** Methods and techniques for effective teaching and learning in career and technical classroom, laboratories, and technology-based environments. May not be used for degree credit with CTED 4103.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5170 CTED Workshop**

**Description:** Professional workshops of various topics and lengths. Focus on a particular topic from such areas as the development, use, and evaluation of instructional methods and materials. May not be used for degree credit with WAED 4010. Offered for variable credit, 1-6 credit hours, maximum of 12 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5183 Coordinating Career and Technical Student Organizations and Activities**

**Description:** Student organizations and activities in career and technical education at local, state and national levels. Procedures for planning programs of work, incorporation of student organization activities into curriculum, adviser characteristics and responsibilities, fund-raising activities, and techniques for recognizing outstanding members and community supporters. May not be used for degree credit with CTED 4123.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5193 Safety, Organization and Management of Learning Facilities**

**Description:** Techniques and procedures for organizing and managing career and technical laboratory facilities and learner activities to enhance the quality of instruction and improve efficiency of equipment and space utilization, including all safety rules and procedures. May not be used for degree credit with CTED 4213.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5203 Foundations of Adult and Continuing Education**

**Description:** Societal trends, issues and institutions which have influenced the development and current status of adult and continuing education. Analyses and critiques of contemporary adult and continuing education activities, materials and clientele groups served, and their implications for new existing programs in the field. Previously offered as HRAE 5203 and EDLE 5203.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5213 Occupational Analysis and Curriculum Development**

**Description:** Analysis of occupational job activities; development of course objectives, course outlines, and specific instructional materials for occupational and technical courses. May not be used for degree credit with CTED 4343.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5223 Program Planning for Workforce and Adult Educators**

**Description:** Approaches to program planning designed around continuous improvement methods for problem solving, flow charting, budgeting, gaining program support, and research proven models applicable to workforce and adult education. Previously offered as OCED 5223.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5232 Teaching Related Information**

**Description:** Selection of job-related topics common to most workforce and adult education programs; procedures for incorporating those topics into the regular curriculum. Course previously offered as TIED 5232 and OCED 5232.

**Credit hours:** 2

**Contact hours:** Lecture: 2 Contact: 2

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5233 Advanced Instructional Procedures in Workforce and Adult Education**

**Description:** Advanced methods and procedures for effective teaching and learning in workforce and adult education classrooms and laboratories. Teaching basic education and employment skills and the selection of job-related topics common to most occupations with procedures for incorporating those topics into the regular curriculum. Course previously offered as TIED 5233 and OCED 5233.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5313 Overview of Workforce and Adult Education**

**Description:** Organization of workforce and adult education including its history, principles and evolving social, political and economic forces influencing the field. Course previously offered as OAED 5313 and OCED 5313.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5333 Administration and Supervision of Workforce Education Programs**

**Description:** Understanding and critically analyzing the quality of workforce education courses and the value they hold. Course previously offered as OAED 5333 and OCED 5333.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5340 Special Problems in Workforce and Adult Education**

**Description:** Directed independent study of special topics involving assigned readings, library research, field work or a combination of these. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours. Previously offered as OCED 5340.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5353 Instructional Strategies for Adults**

**Description:** An analysis and application of the various techniques and materials available to facilitate the learning process in workforce and adult education settings. Process of designing effective learning experiences, planning curriculum and developing competencies of the facilitators. Previously offered as HRAE 5253 and EDLE 5353.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5423 Individualized Competency Based Instruction and Customized Training**

**Description:** Principles, techniques, and technologies for creating and delivering individualized competency-based instruction and customized workplace training. Includes LAP systems and customizing for industry. Course previously offered as TIED 5443 and OCED 5423.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5443 Interpreting Research in Workforce and Adult Education**

**Description:** Seminar on the methods of research, review, synthesis and interpretation with application to particular fields of workforce and adult education. Course previously offered as OAED 5443 and OCED 5443.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5683 Legal Issues in Career and Technical Education**

**Description:** Overview of the law and the legal system, including how to perform legal research using library and internet resources, issues involving student organizations, intellectual property, and distance education. May not be used for degree credit with CTED 4683.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5703 Adult Learning in Diverse Settings**

**Description:** The study of adult learning in diverse geographic and cultural settings. Interaction with experts in the field and reflection upon their experiences after returning from travel. Previously offered as HRAE 5703.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5720 Workshop**

**Description:** Professional workshops of various topics and lengths. Each workshop designed to meet unique or special needs of individuals concerned with adult education and workplace learning. Previously offered as OCED 5720. Offered for variable credit, 1-3 credit hours, maximum of 10 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5730 Special Topics in Adult Education**

**Description:** The practice, theory and research related to a current topic in adult education. Previously offered as HRAE 5730. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5733 Current Issues in Career and Technical Education**

**Description:** Defining current issues, conducting action research and proposing possible solutions to current issues in CTED. Debating opposing views and giving logic and reasoning for each view. May not be used for degree credit with CTED 4673.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5833 Global Consulting**

**Description:** The consulting process, including contract, entry, diagnosis, response, disengagement, closure and ethical considerations. The competencies of successful consultants and trainers in the international environment, including cultural adaptations of self and of training materials. Previously offered as HRAE 5833.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5880 Internship in Workforce and Adult Education**

**Description:** Supervised experience working in business, industry, human service, or education settings. Previously offered as OCED 5880. Offered for variable credit, 3-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 3-6

**Contact hours:** Contact: 3-6 Other: 3-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 5910 Developing and Analyzing Teaching Content**

**Description:** Provides opportunity for experienced teachers to incorporate the latest workforce and adult education methodology, strategy, and/or technology into their course of study. Previously offered as OCED 5910. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6000 Doctoral Dissertation**

**Description:** Required of all candidates for the Doctor of Philosophy degree. Credit is given upon completion of the dissertation. Previously offered as OCED 6000. Offered for variable credit, 1-25 credit hours, maximum of 25 credit hours.

**Credit hours:** 1-25

**Contact hours:** Contact: 1-25 Other: 1-25

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6103 Philosophy of Workforce and Adult Education**

**Description:** Alternative perspectives for developing a philosophic position in workforce and adult education. Course previously offered as OAED 6103 and OCED 6103.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation



**WAED 6110 Graduate Reading in Workforce and Adult Education**

**Description:** Supervised readings of significant literature not included in regularly scheduled courses. Previously offered as OCED 6110. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6113 Supervision of Workforce Education Instruction**

**Description:** Theoretical and practical application of current instructional supervision in workforce education setting. Strategies for effective supervision are learned through practice in analyzing teacher instruction for provisional and standard certifications and for industry certified instructors. Course previously offered as OAED 6113 and OCED 6113.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6123 Foundations of Lifelong Learning**

**Description:** The definitions, historical and philosophical development, and the scope and function of lifelong learning. Previously offered as HRAE 6103.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6213 Lifelong Learning and Performance**

**Description:** Lifelong learning theory within the context of applications in formal and informal settings in the community as well as in the workplace. Synthesis of research findings on changes of cognitive performance due to aging and analysis of recent literature on participation in adult education and training. Previously offered as OAED 6213 and HRAE 6213.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6223 Current Research in Adult Education**

**Description:** Analysis of the major research trends in the field of adult education. Recent research studies in the field. Previously offered as HRAE 6223.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6233 Managing Knowledge in Learning Organizations**

**Description:** Analyze the knowledge management concepts of informal learning, communities of practice, knowledge/learning transfer, organizational learning, and knowledge creation in learning organizations and workplaces. Conduct self-directed research projects on course-related topics and develop a conceptual map of learning concepts. Previously offered as OCED 6233.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6253 Critical Issues in Adult Education**

**Description:** Exploration of current issues of concern to adult educators from diverse settings. Previously offered as HRAE 6233.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6330 Special Topics in Adult Education**

**Description:** Analysis and critique of the application of adult learning principles and methods in one of the numerous diverse settings in which adult education is practiced. Previously offered as HRAE 6330. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6333 Strategic Planning in Workplace Learning and Organizational Performance**

**Description:** Theory, trends, and competency model development performance areas. Course previously offered as OAED 6333 and OCED 6333.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6343 Financing Workforce and Adult Education**

**Description:** Development of conceptual and legal bases for funding public workforce and adult education programs. Sources of funds, distribution strategies, local, state and federal accountability requirements, and fraud and abuse funds. Previously offered as OCED 6343.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6353 Future of Technology, Work and Society**

**Description:** Complex interrelationships among emerging and future technologies, human society, and the definition and evolution of work in a global society. Traditional and emerging theoretical frames for technology and the future. Previously offered as OCED 6353.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Educ Found Leadersh & Aviation

**WAED 6880 Doctoral Internship in Workforce and Adult Education**

**Description:** Directed field experiences related to the participant's area of concentration. Practice and testing ideas, theories and concepts learned in graduate study. Previously offered as OCED 6880. Offered for variable credit, 1-8 credit hours, maximum of 8 credit hours.

**Credit hours:** 1-8

**Contact hours:** Contact: 1-8 Other: 1-8

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Educ Found Leadersh & Aviation

## Undergraduate Programs

- Elementary Education, BS (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/elementary-education-bs/>)
- Secondary Education: English, BS (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/secondary-education-english-bs/>)
- Secondary Education: Mathematics, BS (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/secondary-education-mathematics-bs/>)
- Secondary Education: Science, BS (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/secondary-education-science-bs/>)
- Secondary Education: Social Studies - Alternative Education, BS (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/secondary-education-social-studies-alternative-education-bs/>)
- Secondary Education: Social Studies, BS (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/secondary-education-social-studies-bs/>)

## Graduate Programs

The School offers graduate degree programs at the master's and doctoral levels. While specialization is required, maximum program flexibility enables students to meet individual goals. Programs are designed to prepare persons to enter public or private elementary and secondary schools as teachers or school psychologists, curriculum directors, department heads, reading/literacy specialists and instructional leaders or enter other educational institutions and community agencies as educational leaders. Doctoral programs provide preparation for university teaching and research, as well as for P-12 roles, such as curriculum administrators.

Programs in the School offer the Master of Science (MS) in Teaching, Learning, and Leadership, Master of Arts in Teaching (MATT), Master of Science in School Psychology, a Graduate Certificate in College Teaching, an education Specialist in School Psychology, a Doctor of Philosophy in School Psychology, and a Doctor of Philosophy (PhD) in Education.

## Master of Science in Teaching, Learning and Leadership (TLL)

Erin Dyke, PhD—Associate Professor and TLL Degree Coordinator

A student may earn the degree of Master of Science (MS) in Teaching, Learning, and Leadership. Students specialize in several areas highlighted below as TLL options. All options include at least one research course. Students planning an emphasis in K-12, secondary education, or math/science education may incorporate graduate coursework from an academic discipline. The master's degree program is also frequently designed to qualify graduates for certification in a specific area.

The *Curriculum and Leadership Studies* option provides a sound foundation in curriculum knowledge including the social, philosophical, ethical, political, historical and psychological aspects of curriculum, curriculum planning, pedagogy and curriculum leadership. The degree program will deepen one's knowledge of curriculum and will prepare graduates for positions as curriculum leaders, curriculum planners, curriculum administrators, curriculum consultants, teacher leaders and teacher researchers. Program content will benefit those teachers pursuing National Board Certification. Many classes are offered on both Stillwater and Tulsa campuses.

The *K12 Masters* (K12) provides choices for students to include coursework to enhance their understanding of teaching and learning at their chosen level, and in the case of secondary or K-12 to include content area coursework.

The *Math/Science Education* option provides extended coursework in both content area and pedagogy as students take courses in math or science education and additional math or science courses through the College of Arts and Sciences. The option also includes coursework integrating math and science pedagogy so that graduates will be skilled in content integration between the two areas. The option is designed to prepare teacher leaders in math education and/or science education. This option asks applicants to either hold an undergraduate major or minor in mathematics or science or post a satisfactory score on the quantitative portion of the Graduate Record Exam.

The *Reading and Literacy* option provides students with experiences to develop knowledge of comprehensive, P-12 literacy curriculum and instruction including regular and intensive reading instruction, literacy assessment and evaluation, language arts/writing instruction, and the roles of children's literature. The program also supports candidates' development in the areas of education theory and research, curriculum design, creating literate environments, appreciating and including diverse learners, and providing quality professional development as program administrators or literacy coaches. Students who complete the Reading Specialist requirements can be recommended to the Oklahoma State Department of Education for P-12 Reading Specialist certification.

The *Special Education* option is designed to prepare educators to work effectively with children and youth with mild to moderate disabilities. The option encompasses two primary pathways: Advanced Educator and Initial Certification. Classes are scheduled during evenings and weekends, and can be taken on a part-time or full-time basis. Classes utilize a variety of instructional formats including face-to-face classroom interaction, compressed video and hybrid design, where instruction includes both classroom interaction and online learning. To be eligible for state certification, students must pass Teacher Certification Examinations.

## Master of Science in School Psychology

A degree in educational psychology with an option in school psychometrics is awarded to students who are en route for either the EdS or PhD degree in school psychology. Students must be admitted to the EdS or PhD program to receive the MS. (Students are not admitted directly to the MS degree.)

## College Teaching Graduate Certificate

Hongyu Wang, PhD—Professor, Curriculum Studies

College Teaching Graduate Certificate is housed in Curriculum Studies Program at School of Teaching, Learning and Education Studies. It is a stand-alone certificate program to help current college and university faculty (including both full-time and part-time faculty as well as graduate teaching assistants who have college teaching assignments) develop and improve knowledge, skills, and capacities for successful college teaching, as well as advance their teaching vision, philosophy and adaptability in a rapidly changing society at a range of institutions of higher education. Credit hours successfully completed are transferable to Curriculum Studies options in MS and PhD degree.

## Graduate Certificate for Effective Teaching in Elementary Schools

The Graduate Certificate for Effective Teaching in Elementary Schools is housed in the Elementary Education Program at School of Teaching, Learning and Education Studies. It is a stand-alone certificate program to help alternatively-certified teachers develop and improve knowledge, skills, and capacities for successful teaching, classroom management, content pedagogy, and reflection on professional practice. Credit hours successfully completed are transferable to the EMSK12 options in MS in Teaching, Leadership and Learning.

## Graduate Certificate for Effective Teaching in Secondary Schools

The Graduate Certificate for Effective Teaching in Secondary Schools is housed in the Secondary Education Program at School of Teaching, Learning and Education Studies. It is a stand-alone certificate program to help alternatively-certified teachers develop and improve knowledge, skills, and capacities for successful teaching, classroom management, content pedagogy, and reflection on professional practice. Credit hours successfully completed are transferable to the EMSK12 options in MS in Teaching, Leadership and Learning.

## Graduate Certificate for Elementary Mathematics Specialist

Jennifer Cribbs—Professor, Math Education

## Graduate Certificate for STEM Education

Karen Zwanch—Assistant Professor, Math Education

## Education Specialist (EdS) in School Psychology

Brian Poncy, PhD—Professor, EdS Program Training Director

The NASP-approved (National Association of School Psychologists) specialist program is available. The EdS is the appropriate level of training for those who are interested in applying psychology to a

variety of child-related learning and adjustment problems, and for the improvement of children's mental health in school settings. Specialist-level school psychologists typically work in school systems and function in diverse roles including consultation, psychological and psycho-educational assessment, and intervention to facilitate success for all children. The EdS program at OSU is approximately 77 hours, consistent with the NASP standards for training, and meets the Oklahoma State Department of Education certification requirements. Successful completion of this program leads to eligibility for certification by the Oklahoma State Department of Education as a school psychologist and also the NASP National Certification in School Psychology (NCSP). Applications for the EdS program are due February 1 for consideration for admission the following semester.

## PhD in School Psychology

Gary Duhon, PhD—Professor and PhD Program Training Director

The doctoral program in school psychology is accredited by the American Psychological Association and approved by the National Association of School Psychologists. The program follows the scientist practitioner model that emphasizes the application of the scientific knowledge and methodological rigor in the delivery of school psychological services and in conducting research. Training in the scientist/practitioner model is for the purpose of developing a Science-Based Child/Learner Success orientation in students. Doctoral-level school psychologists function in diverse and important roles including consultation, assessment, intervention therapy, supervision, program evaluation and research to facilitate success for all learners. They add to the understanding of children and their families by contributing to the scientific knowledge base related to all aspects of child development. They are employed in many different settings including elementary and secondary schools, private practice, university, hospitals and mental health centers. School psychologists work with diverse populations and provide psychological services to children, youth, families, caregivers, school personnel, adult learners and individuals with special needs, as well as to the systems in which these individuals need to be successful. Applications for the PhD program in school psychology are due by January 1 for the following fall enrollment.

## Doctor of Philosophy in Education

Students in the Doctor of Philosophy in Education program critically analyze teaching and learning in different contexts both inside and outside of school, explore how these processes are embedded in wider social, political and economic contexts, and envision the possibilities for improving teaching and learning. To this end, the program has an emphasis on the critical production of research with the intent that graduates from this program will contribute to their scholarly fields while addressing the needs of the state of Oklahoma, the country and the larger global community. The integration of seven degree options—Curriculum Studies; Educational Technology; Language, Literacy, and Culture; Mathematics and Science Education; Professional Education Studies; Social Foundations of Education; and Workforce and Adult Education—provides a conceptually coherent doctoral program in which students and faculty explore teaching and learning in new ways within various cultural milieus, such as the family, occupations, public schools and universities. The Ph.D. degree, with options housed in two Schools within the College of Education, Health and Aviation, prepares researchers and leaders to serve in professional positions in universities, P-12 schools, career and technical schools, research agencies, policy agencies and

other educational settings (such as museums, educational publishing, and curriculum development).

The *Curriculum Studies* option's mission is to educate scholars with a deep understanding and ability to create and use knowledge of curriculum studies in the field of education and in other scholarly communities interested in the advancement of education at the state, national, and international levels. In articulating the field of curriculum studies, it is important to acknowledge the broadest views of curriculum, including content and organization of school, the social context in which school is situated, and the process of education both in and out of school. Curriculum studies is understood as both a disciplinary and an interdisciplinary field of study with its own distinctive history, conceptions, and modes of inquiry, always open to new scholarship. Curriculum theorizing, curriculum development and assessment, pedagogy, curriculum inquiry, curriculum history, leadership and advocacy, critical media literacy, teacher research, and intercultural and international dialogue are all part of the scholarship of curriculum studies in the program. Particular attention is also devoted to those absent from typical curriculum decision making; curriculum studies is concerned with issues of equity, access, and voice. This option is housed in the School of Teaching, Learning and Education Sciences.

The *Educational Technology* option focus is on the core areas of the field: design, development, utilization, production and evaluation of instructional systems, human computer interaction and technology applications to support learning and teaching. The doctoral program emphasizes research using educational technology in applied settings. The Ph.D. in Education/Educational Technology prepares future researchers for a variety of professional positions. Graduates are typically employed as university faculty, educational or instructional technology specialists in universities, community colleges and schools, or as training managers or instructional designer/developers in corporate settings. This option is housed in the School of Educational Foundations, Leadership and Aviation (SEFLA).

The *Mathematics Education* option prepares students to conduct research on teaching and learning mathematics at the P-12 level. Research may focus on a variety of aspects of teaching and learning mathematics including the affective domain and employ a wide variety of quantitative, qualitative or mixed methods. Graduates are prepared to teach a broad range of mathematics education courses at both the undergraduate and graduate levels and are qualified for faculty positions in community colleges or secondary teacher education programs as well as other mathematics education leadership positions. This option is housed in the School of Teaching, Learning and Education Sciences.

The *Language, Literacy, and Culture* option focuses on the intersection of theory, research, practice and policy in the examination of language, literacy and culture from early childhood through adulthood recognizing the centrality of literacy in promoting equitable opportunities in our global society. Students explore language and literacy demands across diverse contexts and across social movements to promote equity and honor linguistic and socio-cultural diversity as cultural capital. Specializations in this option include reading, writing and New Literacies; English education; children's and adolescent literature; and world language education. This option is housed in the School of Teaching, Learning and Education Sciences.

The *Professional Education Studies* option is intended to develop scholars of educational theory and research who advance knowledge fundamental to teaching and learning in a diverse and global society and fundamental to social justice and equity in education. Diverse perspectives include

but are not limited to in-depth study of theories used to advance social justice and equity in education, teaching and learning; analyses of diverse teaching and learning contexts; application of inquiry-based teaching-learning theory; use of research methodologies (qualitative, quantitative, mixed methods and conceptual/theoretical methodologies) for studies in education; and conceptualization and reconceptualization of the meaning and value of social justice and equity in education, teaching, learning and teaching-learning contexts. This option is housed in the School of Teaching, Learning and Education Sciences. Maximum flexibility is provided for students to develop a specialization that meets their scholarly interests and career goals. Special Education is one specialization/emphasis area available in this option.

The *Science Education* option prepares students to conduct research on teaching and learning science at the P-12 level, and beyond. Research may focus on a variety of aspects of teaching and learning science and employ a wide variety of quantitative, qualitative or mixed methods. Graduates are prepared to teach a broad range of science education courses at both the undergraduate and graduate levels and are qualified for faculty positions in community colleges or secondary teacher education programs as well as other science education leadership positions. This option is housed in the School of Teaching, Learning and Education Sciences.

The *Social Foundations* option is intended to prepare future scholars and educators to employ a number of different disciplinary perspectives to analyze critically and evaluate policies and practices within and outside education to understand better how such policies and practices shape educational institutions. This approach is intended to heighten students' abilities to examine, understand and explain educational arrangements, processes and practices to develop a disciplined sense of policy-oriented educational responsibility. Scholars in social foundations are expected to contribute to advancing the educational enterprise at national and international levels. This option is housed in the School of Educational Foundations, Leadership and Aviation (SEFLA).

The *Workforce and Adult Education* option is intended to strengthen research activities for improving practice in occupational education, provide graduate programs that reflect transformative roles in occupational education and the workplace, strengthen leadership and outreach services to the discipline, expand activities in international workforce development, and strengthen the cultural diversity in the field of occupational education studies. The focus is to prepare persons for leadership positions in higher education; international occupational education and workforce development organizations; national, state and community agencies; as well as public and private educational institutions. This option is housed in the School of Teaching, Learning and Education Sciences.

## General Program Requirements, Application Procedures and Financial Aid Master's Program

TLL master's degree options requires a minimum of 36 hours of coursework. In addition to coursework students take a comprehensive exam and complete either a Creative Component or Thesis. The Creative Component can take a variety of forms, as approved by the Advisory Committee, from an advanced paper to a creative demonstration of expertise gained through the degree. The thesis is original research. The student's Advisory Committee (three members) assists the student through all aspects of the program. Application to the Graduate College precedes program admission decisions. For unqualified admission an



applicant must have completed an undergraduate degree in Education or a related field and must submit a curriculum vita and goals statement aligned with the option area chosen. Option areas have minimum grade-point requirements for the undergraduate degree and may have additional materials that make up the admissions packet.

**Teaching Instructors:** Bridget Broome, MS; Amy Dunn, MS; Robin Fisher, MS; Jill Metzger, MS; Dr. John Weaver; Jayne Ann Williamson, MS

## Doctoral Program

The Doctor of Philosophy (PhD) degree requires a minimum of 69 semester hours beyond the master's degree. Application to the Graduate College precedes program admission decisions. For program admission, candidates submit scores from the Graduate Record Exam or the Miller Analogies Test, a Statement of Goals and Objectives, references and examples of written expression. An interview may be required. To enter candidacy, students must pass a qualifying exam. Candidates conduct independent, original research reported through a dissertation. The student's Advisory Committee (four members) assists the student through all aspects of the program.

## Financial Aid

Some support is available each year for research assistantships and for qualified graduate students to assume teaching responsibilities in the undergraduate curriculum. Interested persons are encouraged to apply at any time. Applications can be obtained from the School of Teaching, Learning and Education Sciences.

## Minors

- Public School Support Specialist for Children At-Risk (PSSC), Minor (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/public-school-support-specialist-children-at-risk-minor/>)
- Special Education (SPED), Minor (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/special-education-minor/>)

## Certificates

- Special Education, UCRT (<http://catalog.okstate.edu/education-human-sciences/teaching-learning-educational-sciences/special-education-ucrt/>)

## Faculty

Shelbie Witte, PhD, Professor—School Head and Senior Director of Outreach and Teacher Education

**Professor and Dean:** Jon Pedersen, PhD

**Professors:** Jennifer Cribbs, PhD; Gary Duhon, PhD; Christine Ormsbee, PhD; Brian Poncy, PhD; Jennifer Sanders, PhD; Donita Massengill Shaw, PhD; Sheri Vasinda, EdD; Hongyu Wang, PhD; Qiuying Wang, PhD; Kelly Whalon, PhD; Virginia Worley, PhD

**Associate Professors:** Erin Dyke, PhD; Stephanie Hathcock, PhD; Toni Ivey, PhD; Shanendra Nowell, PhD; M. Sue Christian Parsons, PhD; Adrienne Redmond-Sanogo, PhD; Candace Schell, PhD; Joe Terantino, PhD

**Assistant Professors:** Sarah Donovan, PhD; Robin Fuxa, PhD; Kacey Gilbert, PhD; Joseph Mathews, PhD, Cat Maiorica, PhD, Jennifer Schneider, PhD; Jon Smythe, PhD; Karen Zwanch, PhD

**Assistant Professors of Professional Practice:** Erin Bronstein, PhD

**Visiting Assistant Professor:** Greg Schutte, PhD; Staci Thomas, PhD

**Teaching Assistant Professor:** Jamie Buckmaster, PhD; Shelley Martin-Young, PhD; Jessica Watts, PhD

**Visiting Teaching Assistant Professor:** Lynn Hodge, PhD