

EDUCATION, SCHOOL OF TEACHING AND LEARNING

EDE 5940 Integrated Teaching and Learning 3 Credits

Grading Scheme: Letter Grade

Student interns develop general pedagogical competencies and skills necessary to successful teachers.

Prerequisite: admission to the master's certification program in elementary education plus 15 credits, EDF 6113, and RED 5316 or RED 5355.

EDE 6266 Teaching and Learning in Elementary Classrooms 3 Credits

Grading Scheme: Letter Grade

Introduction to the program.

Prerequisite: admission to the master's certification program in elementary education.

EDE 6325 Teacher Inquiry/Action Research 3 Credits

Grading Scheme: Letter Grade

Purpose, goals, and processes of teacher inquiry and application of this methodology in the classroom.

Prerequisite: EDE 6948.

EDE 6905 Individual Work 1-5 Credits, Max 12 Credits

Grading Scheme: Letter Grade

For advanced students who wish to study individual problems in childhood education and/or early childhood education under faculty guidance.

EDE 6948 Internship in Elementary Schools 1-12 Credits, Max 12 Credits

Grading Scheme: S/U

Supervised teaching in elementary grades K-6.

Prerequisite: consent of the department.

EDE 7047 Issues in Teacher Education 3 Credits, Max 9 Credits

Grading Scheme: Letter Grade

Current issues and theory in teacher education and teacher education reform.

EDF 5552 Role of School in Democratic Society 3 Credits

Grading Scheme: Letter Grade

Common conceptions of democracy, equality, freedom, liberty, and equality and what these conceptions imply for educational aims and practice.

EDF 6520 History of Education 3 Credits

Grading Scheme: Letter Grade

Salient issues in education from the Reformation to the present.

EDF 6544 Philosophical Foundations of Education 3 Credits

Grading Scheme: Letter Grade

Philosophical bases for democracy and education.

EDF 6616 Education and American Culture 3 Credits

Grading Scheme: Letter Grade

Graduate-level introduction to the social foundations of education (history, philosophy, and sociology).

EDF 6636 Theorizing Race and Racism in Educational Research 3 Credits

Grading Scheme: Letter Grade

Keeping with the diverse traditions of racial thought, this course explores several critical theorizations of race prominently featured in educational research, analyzes neglected theorizations from the East and Global South, traces the socio-historical foundations of various theorizations of race, and applies racial theories to frame educational inequities.

Prerequisite: Admission to a graduate program or instructor/department permission.

EDF 6639 Anti-Black Racism in Education 3 Credits

Grading Scheme: Letter Grade

Using an antiracist approach, this class seeks to help students engage in the active process of identifying racism in educational spaces. By exploring how to change systems, organizational structures, policies and practices, and attitudes, students will interrogate racism, white supremacy, power, and privilege within educational institutions, classrooms, and teaching practices.

EDF 6812 Comparative Education 3 Credits

Grading Scheme: Letter Grade

Relationships of school and society in different cultural areas of the world.

EDF 6866 Education in Latin America 3 Credits

Grading Scheme: Letter Grade

This interdisciplinary graduate seminar situates sociopolitical theory and praxis as a proxy for examining education in Latin America. The course also examines the role of social movements and their impacts on current educational practice and policy throughout Latin America.

EDF 6939 Critical Race Theory in Educational Research 3 Credits

Grading Scheme: Letter Grade

This doctoral research seminar offers a conceptual understanding of the legal underpinnings of critical race theory, its foundations in and methodological application to educational research, and an evaluation of critical race theory's tensions in educational research.

Prerequisite: Admission to a graduate program or instructor/department permission.

EDF 7934 Seminar in Educational Foundations 3 Credits, Max 12 Credits

Grading Scheme: Letter Grade

Advanced study in historical, philosophical, social, and comparative foundations.

EDG 5666 Knowing and Learning in Secondary Schools 3 Credits

Grading Scheme: Letter Grade

Examines theoretical basis for the processes of knowing and learning in disciplines that are taught in secondary schools, supporting development of appropriate instructional strategies. Topics include knowledge and memory structure, early learning foundations, problem solving, reasoning, regulatory processes, representation, and how symbolic thinking emerges from the learner's community.

EDG 6017 Writing for Academic Purposes 3 Credits

Grading Scheme: Letter Grade

Enhancing the capacity of doctoral students from all academic disciplines to write for academic purposes. Focusing on exploring the ways in which language is used as a creative resource for presenting information, structuring text, embedding perspectives, developing arguments, referencing sources, and addressing audience needs in academic writing.

EDG 6047 Teacher Leadership for Educational Change 3 Credits**Grading Scheme:** Letter Grade

Understanding teachers' roles in the educational change and improvement process.

EDG 6207 Transforming the Curriculum 3 Credits**Grading Scheme:** Letter Grade

Design more rigorous and engaging curriculum leading to increased student understanding and mastery of subject matter. Examine different ways of assessment.

Prerequisite: EDE 6325.**EDG 6226 Foundations of Research in Curriculum & Instruction 3 Credits****Grading Scheme:** Letter Grade

Introduction to research in curriculum and instruction, scholars in the field, and expectations of the professoriate. Students will explore Boyer's domains of scholarship that serve as a framework for STL doctoral programs.

EDG 6228 Qualitative Research for Practitioner Scholars 3 Credits**Grading Scheme:** Letter Grade

A collaborative exploration of qualitative research in curriculum, teaching, and teacher education. This course is designed specifically for practitioner scholars who remain in their educational contexts and design research to improve those settings.

EDG 6229 Qualitative Research in Curriculum and Instruction 3 Credits**Grading Scheme:** Letter Grade

Provides Curriculum and Instruction graduate students with methods for collecting and analyzing data for qualitative research in educational settings. Students will develop and engage with various techniques for coding, analyzing, and representing qualitative data such as interview, observation, and video data.

Prerequisite: EDG 6226 with a minimum grade of C.**EDG 6305 Multiple Perspectives on Teaching and Learning 3 Credits****Grading Scheme:** Letter Grade

Graduate seminar designed to provide a survey of major theoretical perspectives on learning and instruction, including classical and contemporary theories as well as emerging views.

EDG 6348 Instructional Coaching for Enhanced Student Learning 3 Credits**Grading Scheme:** Letter Grade

This course is designed as a graduate study of instructional coaching, a form of job-embedded professional development focused on improving teaching practice in order to improve student learning. It is designed for educators at all levels and in all roles.

EDG 6356 Teaching, Learning and Assessment 3 Credits**Grading Scheme:** Letter Grade

Historical and in-depth exploration of assessment practices related to curricular issues.

EDG 6378 Learning Science with Technology 3 Credits**Grading Scheme:** Letter Grade

Studies the integration of technology into the learning and teaching of science in grades 7-12. The course addresses the use of a broad range of technology to investigate theoretical principles and models of learning and teaching, available tools, practical applications, and relevant literature.

EDG 6415 Culturally Responsive Classroom Management 3 Credits**Grading Scheme:** Letter Grade

Examines the role culture plays in teaching and learning. Explores what is needed to establish a culturally responsive classroom in which all students can succeed.

EDG 6445 Meeting the Educational Needs of Students Living in Poverty 3 Credits**Grading Scheme:** Letter Grade

Enhancing knowledge of the impact of poverty on children, and improve their instructional and management strategies to better meet the needs of children living in poverty.

EDG 6648 Research Design in Curriculum and Instruction 3 Credits**Grading Scheme:** Letter Grade

Examines research design in curriculum and instruction, including study planning, research design and method, data collection, ethics and rigor. Students will create a research proposal specific to their area of interest in the broad field of education.

Prerequisite: Admission in a graduate program in Curriculum & Instruction. EDG6648**EDG 6664 Survey of Research on STEM Education 3 Credits****Grading Scheme:** Letter Grade

Intended to develop an understanding of the existing research on STEM education. Students will explore the relationships among the complex and multidisciplinary nature, contemporary perspectives, methodologies and methods that are being used to address compelling questions related to curriculum, instruction, learning, and policy.

EDG 6668 Teaching Adults 3 Credits**Grading Scheme:** Letter Grade

This course explores theory and practice related to teaching adult learners. We will study theories of adult learning, principles of teaching adults, and beliefs and practices of exemplary instructors. Students will also consider the aims of teaching in higher education and other settings where adults learn.

Prerequisite: Admission to a graduate program or permission of the instructor/department.**EDG 6805C K-12 Computer Programming Foundations I 3 Credits****Grading Scheme:** Letter Grade

Introduces the principles and practices of object-oriented (OO) programming and procedural programming, and the evolution of hardware, software, and networking technologies as they apply to K-12 education

EDG 6806C K-12 Computer Programming Foundations II 3 Credits**Grading Scheme:** Letter Grade

This second course in a two-part series introduces the principles and practices of software design, basic data structures, and the historical and social aspects of computer science, as it relates to K-12 education

Prerequisite: EDG 6805C.**EDG 6807 Issues and Trends in K-12 Computer Science Education 3 Credits****Grading Scheme:** Letter Grade

Explores current and emerging issues and trends impacting K-12 computer science education. Students will critically examine these areas in light of historical trends, social implications, and the future of CS education. The courses will explore relevant educational theories as well as topics such as social justice, accessibility, and the varying roles of teachers and students in current CS educational approaches.

Prerequisite: ETE 6141 and EDG 6805C.**EDG 6905 Individual Work 1-6 Credits, Max 12 Credits****Grading Scheme:** Letter Grade

For advanced students who wish to study individual problems under faculty guidance.

Prerequisite: student must have approval of proposed project before registering.

EDG 6910 Supervised Research 1-5 Credits, Max 5 Credits

Grading Scheme: S/U
Supervised Research

EDG 6930 Schooling & the Marginalization of Students 3 Credits

Grading Scheme: Letter Grade
Examines the marginalization of vulnerable student populations, which results in high dropout rates and frequent placement of students in the school-to-prison pipeline. Building upon an examination of the connections between theory, practice, student experiences, and policy, this course will support a deep understanding of issues and potential solutions to alleviate the marginalization of children and develop ways to successfully engage all K-12 students.

EDG 6931 Special Topics 1-4 Credits, Max 18 Credits

Grading Scheme: Letter Grade
Special Topics
Prerequisite: consent of instructor.

EDG 6940 Supervised Teaching 1-5 Credits, Max 2 Credits

Grading Scheme: S/U
For graduate students serving as teaching assistants under the supervision of a faculty member.
Prerequisite: adviser's consent.

EDG 6953 TLSI Online Portfolio Preparation 1-3 Credits, Max 3 Credits

Grading Scheme: Letter Grade
Development of portfolio artifacts. Preparation for defense of program portfolio.
Prerequisite: EDE 6325.

EDG 6971 Research for Master's Thesis 1-15 Credits

Grading Scheme: S/U
Research for Master's Thesis

EDG 6973 Project in Lieu of Thesis 1-9 Credits

Grading Scheme: S/U
Developing, testing, and evaluating original educational technology, curricular materials, or an intervention program.

EDG 7224 Critical Pedagogy 3 Credits

Grading Scheme: Letter Grade
Core concepts and practice of critical educational theory.

EDG 7252 Perspectives in Curriculum, Teaching, and Teacher Education 3 Credits

Grading Scheme: Letter Grade
Issues related to curriculum, teaching, and teacher education.

EDG 7303 Teacher Learning and Socialization in High Poverty Schools 3 Credits

Grading Scheme: Letter Grade
Explores theory and research related to teacher learning, focusing on high-poverty schools.

EDG 7359 Professional Development and Teacher Learning 3 Credits

Grading Scheme: Letter Grade
Examining teacher learning within professional development, the essential elements of high quality professional development, how to measure the impact of professional development, and multiple ways in which professional development is being played out in the district, state, and national contexts.

EDG 7365 Practitioner Research: Data Collection and Analysis 3 Credits

Grading Scheme: Letter Grade
Graduate students will continue to cultivate the skills of scholarship through advanced study of practitioner research and its utility within their daily work as educators. Multiple data collection and analysis processes will be explored through experiential learning.
Prerequisite: EDG 7982 – Practitioner Research: Theory and Practice or Instructor approval.

EDG 7941 Field Experience in Curriculum and Instruction 1-4 Credits, Max 10 Credits

Grading Scheme: Letter Grade
Supervised experiences appropriate to the student's professional goals.
Prerequisite: open only to advanced graduate students.

EDG 7979 Advanced Research 1-12 Credits

Grading Scheme: S/U
Research for doctoral students before admission to candidacy. Designed for students with a master's degree in the field of study or students who have been accepted for a doctoral program. Not appropriate for students who have been admitted to candidacy.

EDG 7980 Research for Doctoral Dissertation 1-15 Credits

Grading Scheme: S/U
Research for Doctoral Dissertation

EDG 7982 Practitioner Research: Theory & Practice 3 Credits

Grading Scheme: Letter Grade
Develops a strong theoretical understanding of the purposes of practitioner inquiry, as a form of educator professional development, while helping students to translate this knowledge into practices that support school improvement.
Prerequisite: Intended for doctoral students.

EME 5054 Foundations of Educational Technology 3 Credits

Grading Scheme: Letter Grade
History, foundations, and literature in educational technology.
Prerequisite: consent of instructor.

EME 5207 Designing Technology-Rich Curricula 3 Credits

Grading Scheme: Letter Grade
Extensive work in curriculum development utilizing instructional technologies. Contrasting views of curriculum development.

EME 5404 Instructional Computing II 3 Credits

Grading Scheme: Letter Grade
Overview of educational technologies in teaching and learning. Developing meaningful and engaging learning environments that foster critical inquiry in students.
Prerequisite: The prerequisite is acceptance to a UF graduate or certificate program or approval from the program coordinator.

EME 5405 Internet in K-12 Instruction 3 Credits

Grading Scheme: Letter Grade
Preparing preservice teachers, in-service teachers, and teacher educators to use the Internet.
Prerequisite: Acceptance to a UF graduate program or certificate.

EME 6059 Blended Learning Environments 3 Credits

Grading Scheme: Letter Grade
Exploring blended learning from perspectives of theory and practice. The course is designed for educators and instructional designers in K-12, higher education, corporate environments, and other professional settings.

EME 6065 Human-Computer Interaction and the Learner 3 Credits**Grading Scheme:** Letter Grade

Explores the interface between pedagogy, educational technology, cognitive science, graphic design, and software engineering, and define effective human-computer interaction. We will discuss relevant methods and seminal research, and deduce implications for learning and design of human computer interfaces such as digital games, mobile applications, and adaptive learning systems.

EME 6066 Issues and Trends in Educational Technology Research 3 Credits**Grading Scheme:** Letter Grade

Providing an overview of the "what" and "how" in educational technology research. Having knowledge of the conceptual frameworks and research design paradigms in the field enables students to evaluate the rigor of educational technology research and think more critically about their own research efforts.

EME 6067 Emerging Learning Technologies 3 Credits**Grading Scheme:** Letter Grade

Interactive project-based course offers an opportunity for students to design and develop learning experience (e.g. virtual trips) while mastering the use of an array of emerging tools/devices. Close consideration will be placed, but not limited, to immersive virtual reality (VR), augmented reality (AR), mixed reality (MR), and 3D modeling/printing.

EME 6074 Mobile Technologies in Education 3 Credits**Grading Scheme:** Letter Grade

Explores national and international perspectives on how mobile technologies are currently being used to teach and learn in formal and informal environments. Students will identify strategies used for implementing mobile technologies and how these are adapted based on socio-political, economic, and educational contexts.

EME 6156 Games and Simulations for Teaching and Learning 3 Credits**Grading Scheme:** Letter Grade

The characteristics and terminology of games and simulations; development life cycles; design principles; evaluation; and an emphasis on connecting principles of learning to the design of games and simulations.

Prerequisite: None.**EME 6208 Designing Integrated Media Environments I 3 Credits****Grading Scheme:** Letter Grade

Design traditional multimedia environments and learn advanced techniques for creating presentation. Importance of cognitive processes and their relationships to design and instruction.

EME 6209 Designing Integrated Media Environments II 3 Credits**Grading Scheme:** Letter Grade

Project based. Applying skills Studying the development and problem-solving as applied to real world educational problems with solutions designed and implemented in various programming and scripting languages. Topics include design principles, testing, and debugging. Prior programming experience is not required. and theories learned previously. Real-world problems.

Prerequisite: EME 6208.**EME 6235 Managing Educational Projects 3 Credits****Grading Scheme:** Letter Grade

Examining principles of planning, scheduling, allocating resources, budgeting, proposals preparation, cost control, risk assessment and personnel management for instructional projects. Students negotiate an effective design project plan, how to implement the plan, and how to control and monitor project activities.

EME 6236 Distance Education Leadership and Management 3 Credits**Grading Scheme:** Letter Grade

Examining the roles and responsibilities of leaders and managers in distance education programs. Focuses on contributors to quality program delivery in K-12, higher education, corporate, healthcare, and international contexts.

EME 6458 Distance Teaching and Learning 3 Credits**Grading Scheme:** Letter Grade

Topics assist educators who teach at distance in synchronous time. Effective teaching methodologies, along with various theories about distance learning, examined.

EME 6480 Quantitative Methods in Educational Technology Research 3 Credits**Grading Scheme:** Letter Grade

This applied quantitative methods course focuses on examining educational technology research and will provide students with the knowledge and skills to apply appropriate statistical methods, interpret results from statistical analyses, and write the results appropriate for scholarly publication. All statistical techniques use real-world datasets addressing research problems in educational technology.

Prerequisite: EDF 7486 or EDF 6401 or instructor permission.**EME 6606 Advanced Instructional Design 3 Credits****Grading Scheme:** Letter Grade

Focuses on the student who is becoming an instructional design (ID) Professional by refining skills and adding to the skills learned in the beginning Instructional Design course, building on the foundational knowledge about the practice of ID, and encouraging the development of communication skills through formal project management.

Prerequisite: EME 6609.**EME 6609 Instructional Design 3 Credits****Grading Scheme:** Letter Grade

Focuses on the application of instructional design principles to the development of instruction. Topics include contemporary issues and trends in instructional design, foundations in learning research, requirements for instruction, task and needs analysis, learning situations and instructional models, learner characteristics, hardware and software innovations, assessing instructional outcomes, and factors affecting utilization.

EME 6637 Managing and Analyzing Multimodal Educational Data 3 Credits**Grading Scheme:** Letter Grade

This course is designed to prepare educational researchers and practitioners to manage and analyze multimodal educational data. In this online course, students will learn about the unique characteristics of multimodal educational data and apply appropriate techniques to discover useful knowledge and insights.

Prerequisite: Acceptance into a UF graduate or certificate program or approval from course coordinator.

EME 6638 Theory, Design, and Development of Stealth Assessment for Learning 3 Credits**Grading Scheme:** Letter Grade

Explains an innovative assessment method for learning called stealth assessment which is ubiquitous, unobtrusive, and in real-time. It aims to blur the boundaries between gameplay, learning, and assessment. Students in this course learn how to design a valid and reliable assessment and embed it in a technology-rich environment (e.g., an educational game). Students also learn about the related theories, examples, and the design and development processes of stealth assessment.

Prerequisite: Graduate students only.**EME 6645 Neurotechnologies in Education 3 Credits****Grading Scheme:** Letter Grade

This seminar focuses on the neuroscience frameworks and technologies that are gaining popularity in educational research as a way to supplement and offset the weaknesses of self-reported data. We will be reading and discussing seminal works linking attention, cognition, emotion, and learning, and engage in hands-on practice with the neurotechnologies.

Prerequisite: Admission to a graduate degree program or instructor permission.**EME 6651 Learning Analytics Concepts and Techniques 3 Credits****Grading Scheme:** Letter Grade

This course equips students to leverage educational data collected from technology-enhanced learning environments. Students will explore data mining techniques and process and analyze various types of educational data to discover useful insights/ knowledge. This course prepares students as educational researchers/ practitioners able to use learning analytics in their subject area.

Prerequisite: Admission to a graduate (degree or certificate) program or instructor permission.**EME 6935 Seminar: Distance Education Issues and Applications 1 Credit, Max 4 Credits****Grading Scheme:** Letter Grade

Mechanisms and logistics that support distance education development and delivery.

EME 6945 Practicum in Educational Media and Instructional Design 3-8 Credits, Max 8 Credits**Grading Scheme:** Letter Grade

Supervised experiences appropriate to the student's professional goals.

EME 7345 Implementing Educational Technology Innovations (ETIs) 3 Credits**Grading Scheme:** Letter Grade

Focuses on diffusion and evaluation as key components to successfully implementing ETIs. Students will study innovation diffusion theory, change theory, frameworks and considerations for evaluating ETIs and study designs and instruments for appropriate for ETI implementation. Students will gain authentic practice implementing ETIs.

EME 7938 Seminar in Educational Media and Instructional Design 3 Credits, Max 9 Credits**Grading Scheme:** Letter Grade

Seminar for advanced degree graduate students.

ESE 5426 Data-Driven Decision Making for Secondary Teachers 3 Credits**Grading Scheme:** Letter Grade

Data-Driven Decision making focuses on discipline-specific assessments and the use of data to impact learning and teaching practices. Students will develop and adopt an inquiry stance as they integrate authentic assessment practices with standards-based instruction.

ESE 6345 Effective Teaching and Classroom Management 3 Credits**Grading Scheme:** Letter Grade

Advanced strategies for planning and presenting the general academic content of mathematics, science, foreign language, social studies, and English in the secondary school.

Prerequisite: consent of departmental.**ESE 6905 Individual Work 1-4 Credits, Max 12 Credits****Grading Scheme:** Letter Grade

Individual Work

ESE 6939 Special Topics 3 Credits, Max 10 Credits**Grading Scheme:** Letter Grade

Special Topics

ESE 6945 Student Teaching in Secondary School 2-9 Credits, Max 9 Credits**Grading Scheme:** Letter Grade

Supervised teaching in the secondary school, Grades 6-12.

Prerequisite: consent of instructor.**ETE 6141 K-12 Computer Sc Pedagogy I 3 Credits****Grading Scheme:** Letter Grade

This is the first of a two-course sequence, where students will be introduced to a variety of different conceptualizations and pedagogical approaches for computer science education for K-12. Students will spend their time at the micro level, learning about the strategies for teaching computer science as well as lesson planning.

Prerequisite: Admission into the graduate certificate program in K-12 Computer Science Education or master's program in the UF College of Education;**Corequisite:** EDG 6805C.**ETE 6142 K-12 Computer Sc Pedagogy II 3 Credits****Grading Scheme:** Letter Grade

This is the second of a two-part sequence focused on computer science pedagogy in K-12 schools. Previously, students spent their time at the micro-level, learning how to develop lesson plans. In this course, students will spend their time at the macro-level and learn how to develop entire units of instruction.

Prerequisite: ETE 6141 and EDG 6805C;**Corequisite:** EDG 6806C.**FLE 6165 Bilingual-Bicultural Education 3 Credits****Grading Scheme:** Letter Grade

Foundational principles and practices in the field of bilingual-bicultural education in the U.S. and in other nations. Critical examination of theories and practices related to language policy in education.

FLE 6167 Cross-Cultural Communication for Teachers 3 Credits**Grading Scheme:** Letter Grade

Critically explores ways educators can establish equitable and culturally responsive classrooms. Examines theories related to language, culture, and social justice.

LAE 5341 Language Arts: Teaching Nonfiction Writing 3 Credits**Grading Scheme:** Letter Grade

Deepen knowledge of the teaching of nonfiction writing, including writing across the curriculum. An examination of approaches to the teaching of informational, explanatory, opinion, and argumentative texts; create informational projects; and design classroom applications.

LAE 6298 Literacy & Language Instruction 3 Credits**Grading Scheme:** Letter Grade

Prepares preservice teachers to teach language arts integrated with writing children's literature. The study combines theory practice in language/writing development, differential instruction assessment for diverse students using literature for language writing instruction.

LAE 6339 Curriculum, Methods, and Assessment in Secondary English Language Arts 3 Credits**Grading Scheme:** Letter Grade

Introduction to the theory and practice of teaching English.

Prerequisite: 30 hours of upper-division English. Designed for Proteach students only.

LAE 6348 Teaching Multiliteracies 3 Credits**Grading Scheme:** Letter Grade

Application of theory and methods in teaching multiple modes of literacy.

LAE 6407 Early Childhood Children's Literature 3 Credits**Grading Scheme:** Letter Grade

Methods of involving young children (birth through kindergarten) with literature and the role of literature in the home and school.

Prerequisite: a course in children's literature.

LAE 6446 Multicultural Literature for Children and Adolescents 3 Credits**Grading Scheme:** Letter Grade

Examines diverse cultures and theories in multicultural literature.

LAE 6865 Teaching Media Literacy with the Internet 3 Credits**Grading Scheme:** Letter Grade

Application of literacy theory and pedagogy to teaching multimodal internet texts.

LAE 6869 Teaching Digital Storytelling 3 Credits**Grading Scheme:** Letter Grade

Focusing on educators by using storytelling and digital tools to advance literacy, learning, and the meaningful use of technology in educational settings.

LAE 6939 Literacy, Family, and Culture 3 Credits**Grading Scheme:** Letter Grade

Examines various literacy patterns of students with non-mainstream cultural, social, and linguistic backgrounds; explores the impact of home literacy on school learning.

LAE 6945 Practicum and Assessment for Teachers of Secondary School English 3 Credits**Grading Scheme:** Letter Grade

Directed experiences focused on applying instructional strategies, assessing student progress, and reflecting on ethical issues. Includes experiences in field and laboratory work.

Prerequisite: consent of department chair.

LAE 6946 Children's Literature in Educational Settings 3 Credits**Grading Scheme:** Letter Grade

Field studies in library or school settings with high involvement in children's literature.

Prerequisite: LAE 3005.

LAE 7934 Seminar in Composition Theory and Practice 3 Credits**Grading Scheme:** Letter Grade

Examines the theory of composition, and research on the impact of writing.

LAE 7936 Seminar in English Language Arts 3 Credits, Max 6 Credits**Grading Scheme:** Letter Grade

Contemporary developments and research in English language arts and education.

Prerequisite: consent of instructor.

LAE 7938 Lit, Cult and Politics 3 Credits**Grading Scheme:** Letter Grade

Lit, Cult and Politics

MAE 5332 Secondary School Mathematics Methods and Assessment 3 Credits**Grading Scheme:** Letter Grade

Patterns of mathematics curriculum; practices in teaching mathematics; preparing, selecting, and using instructional materials; assessment techniques.

Prerequisite: preparation in the subject area equivalent to the requirements for high school certification.

MAE 5347 Teaching K – 6 Mathematics Methods 3 Credits**Grading Scheme:** Letter Grade

Instructional strategies to support young learners' mathematical understanding.

Prerequisite: Admission to graduate status.

MAE 5396 Using Formative Assessment to Improve Mathematical Learning 3 Credits**Grading Scheme:** Letter Grade

Developing the use of formative assessment in the practicing teacher's mathematics classroom for selecting instructional strategies appropriate for the teacher's particular students. Topics include developing a definition of formative assessment, investigating tiered instruction, supporting low achieving students, challenging high achieving students, and implementing management strategies.

Prerequisite: Admission to graduate status.

MAE 5945 Secondary School Mathematics Practicum 3-6 Credits, Max 6 Credits**Grading Scheme:** Letter Grade

Directed experiences emphasizing instructional strategies, selecting instructional materials, sequencing student activities, using instructional moves, and diagnosing student progress. Field and laboratory settings.

MAE 6177 Mathematics Teaching and Learning in Higher Education 3 Credits**Grading Scheme:** Letter Grade

Strategies for teaching mathematics in higher education. Explore learning theories, evidence-based teaching methods, and assessment strategies through readings, activity design, case discussions, and classroom observations.

MAE 6313 Problem Solving in School Mathematics 3 Credits**Grading Scheme:** Letter Grade

Analyzes problem solving as an underlying theme in mathematics education focused on K-12 schools. Emphasizes development of pedagogical content knowledge in mathematics through modeling, inquiry, and problem solving.

MAE 6349 Classroom Contexts that Support Self-Regulated Learning and Mathematical Understanding 3 Credits**Grading Scheme:** Letter Grade

Examining instructional strategies for supporting learners' self-regulated learning and mathematical understanding. Topics include mathematical proficiency and teaching for mathematical proficiency, classroom environments that support mathematical understanding, setting norms for classroom discourse, teaching via problem solving, and developing contexts that support self-regulated learning.

MAE 6916 Inquiry in Mathematics Teaching 3 Credits**Grading Scheme:** Letter Grade

Promoting reflective practices in teaching mathematics, this online course will be centering around a self-directed classroom inquiry project.

The course first solidifies expertise in key topics in mathematics education. It then moves to the teacher's development, implementation, and evaluation of the classroom inquiry project in his/her classroom.

Prerequisite: EDE 6325 Teacher Inquiry/Action Research**MAE 7899 Mathematics Education Seminar 3 Credits****Grading Scheme:** Letter Grade

Issues and problems in mathematics education. Investigating and planning research relevant to selected problems.

Prerequisite: MAE 6138.**MUE 7938 Music Education Seminar 3 Credits****Grading Scheme:** Letter Grade

Contemporary issues and problems in music education. Investigating and planning research relevant to selected problems.

RED 5337 Reading in the Secondary School 3 Credits**Grading Scheme:** Letter Grade

Patterns of reading instruction in the secondary school; methods of teaching reading for teachers of all subject areas; preparing, selecting, and using instructional materials; selected field or micro-teaching experiences.

RED 5355 Reading Instruction in the Elementary School 3 Credits**Grading Scheme:** Letter Grade

Emphasizes materials and methods for teaching reading to students in the upper elementary grades, middle, and junior high schools.

RED 5399 Practices in Beginning Reading Instruction 3 Credits**Grading Scheme:** Letter Grade

Providing students with deeper knowledge in specific areas related to beginning reading instruction. Course content focuses on instruction in advanced phonics/word study and structural analysis, vocabulary, and comprehension, integrating assessment and instruction for classroom application, and differentiating instruction for students, including ELLs, Gifted and ESE students.

Prerequisite: LIN 3710 and RED 3310.**RED 6346 Seminar in Reading 3-6 Credits, Max 9 Credits****Grading Scheme:** Letter Grade

Variable topics on reading and literacy.

Prerequisite: consent of instructor.**RED 6448 Diagnosing and Remediating Reading Difficulties 3 Credits****Grading Scheme:** Letter Grade

Learn about assessments and materials that may be used by a classroom teacher to observe and document K-12 learners' reading performance, design and implement appropriate instruction and remediation activities, and evaluate learner progress.

Prerequisite: Admission to a graduate program or certificate in the College of Education.**RED 6520 Classroom Literacy Assessment and Instruction 3 Credits****Grading Scheme:** Letter Grade

Using classroom assessment information to guide literacy instruction.

Prerequisite: minimum of 1 introductory reading instruction course.**RED 6546C Diagnosis of Reading Difficulties 3 Credits****Grading Scheme:** Letter Grade

Individual assessment techniques for locating difficulties in literacy acquisition.

RED 6548C Remediation of Reading Difficulties 3 Credits**Grading Scheme:** Letter Grade

Advanced procedures and practices for remediating reading difficulties in the classroom and clinic.

Prerequisite: RED 6546C.**RED 6647 Trends in Reading 3 Credits****Grading Scheme:** Letter Grade

Understanding current trends and issues in literacy education.

RED 6843 Reading Practicum 1 Credit, Max 3 Credits**Grading Scheme:** Letter Grade

Combine the theoretical study of teaching methods, techniques, and practices with on-going classroom experiences. Students will collect and analyze assessment data, plan instruction based on information from data, implement effective instruction, and monitor students' progress.

Prerequisite: 3 credits of prior coursework with an RED or TSL prefix.**RED 6941 Practicum in Diagnosis and Remediation of Reading Difficulties 3 Credits****Grading Scheme:** Letter Grade

Diagnosis and remediation of reading difficulties with at-risk K-12 learners.

RED 7019 Foundations of Literacy 3 Credits**Grading Scheme:** Letter Grade

Foundational understanding of theories and discussions related to (and research methods involved in) studying literacy and literacy education.

SCE 5140 Science Curriculum Development 3 Credits**Grading Scheme:** Letter Grade

Allows teachers to explore science curriculum development from theoretical and practical perspectives. Focuses on reform-based science curriculum and the research and science-specific pedagogical themes underlying their development. The course is divided into three sections: Science Curriculum Reform, Models of Science Curriculum Development, and Curriculum Exemplars.

SCE 5316 Inquiry-Based Science Teaching 3 Credits**Grading Scheme:** Letter Grade

Inquiry into science content pedagogy and practice in elementary classrooms.

SCE 5695 Diversity and Equity in Science Teaching 3 Credits**Grading Scheme:** Letter Grade

Providing an overview of the challenges and issues that face diverse populations of learners as they struggle to gain acceptance, recognition, and access to an appropriate science education.

SCE 5765 Data-Driven Science Instruction 3 Credits**Grading Scheme:** Letter Grade

Focusing on assessment of science instruction and learning. The course will include the study of research-based approaches to assessment, learning, and teaching. In addition, the course will facilitate the adoption of an inquiry stance for integrating assessment data into teaching decisions.

SCE 6117 Science Education in the Elementary School 3 Credits**Grading Scheme:** Letter Grade

Current problems, new materials and teaching techniques, research and recent developments in the sciences.

SCE 6337 Secondary Science Methods and Assessment 3 Credits**Grading Scheme:** Letter Grade

Introduction to the theory and practice of teaching secondary school science, emphasizing planning, instruction, and assessment.

SCE 6930 Seminar in Science Education 3 Credits, Max 9 Credits**Grading Scheme:** Letter Grade

Examine current issues and trends in science education, the research base upon which modern science education has been constructed, and the historical, philosophical, and methodological underpinnings of researchers in the discipline.

Prerequisite: Admission to graduate program in the College of Education or instructor permission.**SCE 6947 Practicum in Secondary Science Teaching and Assessment 3 Credits****Grading Scheme:** Letter Grade

Directed experiences emphasizing instructional strategies, selecting instructional materials, sequencing student activities, using instructional moves, and diagnosing student progress. Field and laboratory settings.

Prerequisite: consent of department chair.**SMT 6066 Data Wrangling and Visualization in Educational Research 3 Credits****Grading Scheme:** Letter Grade

Data wrangling is the systematic process of transforming raw data into a more structured form, while visualization is the use of graphical representations for reasoning and summarizing. This course will improve your understanding and comfort in working with data as well as your confidence and efficiency with research. Coursework will be practical and include ample hands-on experience and transferable expertise. Students are welcome and encouraged to use existing personal data sources.

SMT 6106 Informal STEM Practice 3 Credits, Max 6 Credits**Grading Scheme:** Letter Grade

For students who are interested in learning about informal STEM education, including that practiced at museums, science centers, aquaria, zoos, and parks. The online portion will involve weekly lectures, readings, and discussions. The internship may occur at any approved physical or virtual venue of the student's choosing.

Prerequisite: SMT3100 - Knowing and Learning in Mathematics and Science Teaching or EDG 5666: Knowing and Learning in Secondary Schools**SSE 5945C Practicum in Secondary Social Studies Teaching and Assessment 3 Credits****Grading Scheme:** Letter Grade

Directed experiences emphasizing instructional strategies, instructional materials, and student assessment. Field and laboratory settings with microteaching assignments.

SSE 6117 Social Studies Education--Elementary School 3 Credits**Grading Scheme:** Letter Grade

Contributions of social education to the total elementary school program, emphasizing social interaction and programs and procedures in the social studies area.

Prerequisite: graduate curriculum course.**SSE 6133 Secondary School Social Studies Methods and Assessment 3 Credits****Grading Scheme:** Letter Grade

Preparing, selecting, and using instructional methods, materials, and assessments in the social studies content area.

SSE 6478 Global Studies Methods for Social Studies 3 Credits**Grading Scheme:** Letter Grade

Provides pre-service middle and secondary social studies teachers with an overview of standards-based global issues appropriate for grades 6-12 social studies classes. This course focuses on effective techniques for planning, implementing, and assessing teacher-directed and teacher-facilitated global education learning experiences.

TSL 5142 ESOL Curriculum, Methods, and Assessment 3 Credits**Grading Scheme:** Letter Grade

Curriculum, methods, and assessment for second language learners in K-12 classrooms.

Prerequisite: TSL 3526.**TSL 5335 ESOL and Reading for Secondary Teachers 3 Credits****Grading Scheme:** Letter Grade

This course is designed to develop students' understanding of literacy teaching and learning, with a dual focus on native speakers of English and English Language Learners. It focuses on methods and materials that can be used to support the development of proficient and critical adolescent readers in academic content areas.

TSL 6145 Curriculum and Materials Development for ESOL K-12 3 Credits**Grading Scheme:** Letter Grade

Developing and adapting standards-based curriculum and materials for L2 oral language and literacy, academic content, and K-12 ESOL instruction.

TSL 6245 Language Principles for ESOL Teachers 3 Credits**Grading Scheme:** Letter Grade

Applied linguistics for teachers. Language-acquisition theories related to learning a second language in school. Connections between language and literacy development and effective instruction for English language learners.

TSL 6373 Methods of Teaching ESOL K-12 3 Credits**Grading Scheme:** Letter Grade

Effective oral language and literacy instruction for K-12 English language learners.

TSL 6385 Technology for Language and Reading Education 3 Credits**Grading Scheme:** Letter Grade

Explores foundational issues at the intersection of technology and language and reading education. Prepares students to research, create, and evaluate technologically enhanced instruction and assessment for foreign language education (FLE), English for speakers of other languages (ESOL), and reading education in K-20 contexts.

Prerequisite: Permission of Instructor.**TSL 6440 Testing and Evaluation of ESOL 3 Credits****Grading Scheme:** Letter Grade

Introduction to assessment issues and experience in developing assessment techniques for learners of English as a second language.

TSL 6670 Multilingualism from a Global Perspective 3 Credits

Grading Scheme: Letter Grade

Explores key educational issues and dilemmas in multilingual societies today from an international perspective. Examines the role of language education in times of globalization and how language ideologies, language policies and language practices shape schooling experiences in multilingual contexts.

Prerequisite: Admission to a graduate program in the College of Education, Linguistics, or Latin American Studies.

TSL 6700 Issues in ESOL for School Counselors and Psychologists 3 Credits

Grading Scheme: Letter Grade

Gives school counselors and psychologists an overview of key concepts and issues related to ESOL students in K-12 schools.