EDUC 5100
Personal Finance in Education
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Focuses on teaching how to better manage personal finances. Requires students to develop lesson plans on personal financial planning, including goal setting, time value of money, personal financial statements, cash management, credit cards, credit, loans, buying skills, insurance, taxes, housing, investment alternatives, estate and retirement plans. Course fee of $15 per credit applies.

EDUC 520R
Special Topics in Education
.5 to 3:0 to 3:0 to 9 On Sufficient Demand
* Prerequisite(s): University Advanced Standing

Provides professional educators, administrators, policy makers, and interested members of the public with increased understanding of the latest research affecting K-12 education. Focuses on helping participants keep abreast of effective teaching strategies and curriculum design, alternative learning structures, innovative teaching technologies, educational policies and legislation, etc. May be repeated as many times as desired. Course fee of $15 per credit applies.

EDUC 5300
Content-based Curriculum and Instruction and Assessment
3:3:0 Summer
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides a foundation in curriculum theory and practice. Introduces instructional design theories, principles and models. Outlines the historical development, current processes and practices of curriculum development, instructional design, implementation, and assessment. Examines applications and processes of curriculum decision making and the impact of national standards on curriculum design and development at the classroom, district, state, and national levels. Requires 15 field experience/practicum hours in addition to class time. Course fee of $15 per credit applies.

EDUC 5340
Methods of Second Language Acquisition for Practitioners
3:3:0 Summer
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers to teach content in students' second language in U.S. public schools. Includes applied aspects of second language learning and teaching. Provides general and special educators, and dual language or second language specialists the techniques, activities, strategies, and resources needed to plan instruction for second language learners. Emphasizes the development of teaching skills in language development, literacy, and content-area instruction for K-12 students. Requires 15 hours of field experience/practicum hours as part of course assignments. Course fee of $15 per credit applies.

EDUC 5350
Theories of Second Language Acquisition for Practitioners
3:3:0 Summer
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines the intricate web of variables that interact in the second language learning process, including linguistic, cognitive, social, cultural, and political factors. Examines each of these factors in turn and develops understanding of how they work together to foster or inhibit successful second language learning and acquisition. Requires 15 hours of field experience/practicum hours as part of course assignments. Course fee of $15 per credit applies.

EDUC 5360
Multicultural Education for Practitioners
3:3:0 Spring
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Identifies the connections between language, culture, and identity. Examines multicultural education in the classroom through a focus on the historical, sociological, and philosophical foundations of education in the development of the United States and its education system. Outlines methods to create multicultural / multilingual curricula with a special focus on culturally/linguistically-responsive instruction and assessment techniques. Course fee of $15 per credit applies.

EDUC 5370
Assessment for Second Language Learners for Practitioners
3:3:0 Summer
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines methods and practice for the testing of bilingual students at the classroom level. Focuses on assessment of language proficiency in English language learners (ELL) and the assessment of academic achievement of bilingual students in specific content areas. Develops and reviews tests (test items), response formats, scoring systems, and test administration procedures as critical to attaining validity and fairness. Examines major current testing policies for linguistic minority students. Practicum required. Course fee of $15 per credit applies.

EDUC 5380
Second Language Literacy Development for Practitioners
3:3:0 Fall
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides teachers with a theoretical framework for understanding literacy and linguistic development of students learning in a second language. Provides an understanding of the literacy instructional needs of these students. Increases knowledge and skill in instructional practices that support second language literacy learning. Course fee of $15 per credit applies.

EDUC 5390
Family and Community Involvement for Practitioners
3:3:0 Spring
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides strategies classroom teachers may use for facilitating community participation in the education of minorities. Examines how the teacher's role impacts the adjustment of students to the classroom environment. Studies the techniques of family-school collaboration as well as constructive methods of evaluation. Practicum required. Course fee of $15 per credit applies.
Education

EDUC 5500
Teaching K-6 Numbers and Operations for Practitioners
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Designed for K-6 teachers. Covers the content of Number and Operations to develop a comprehensive understanding of our number system and relate its structure to computation, arithmetic, algebra, and problem solving. Includes number, number sense, computation, and estimation through a coordinated program of activities that develop number concepts and skills. Special attention in this course will be given to planning lessons in the mathematical content of number and operations and problem solving strategies. Emphasizes interpreting and assessing students’ work and learning, and the integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs). Course fee of $15 per credit applies.

EDUC 5510
Teaching K-6 Rational Numbers and Proportional Reasoning for Practitioners
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides practicing teachers a deeper understanding of rational numbers, operations with rational numbers, proportionality, and instructional strategies to facilitate the instruction of this content for elementary students. Course fee of $15 per credit applies.

EDUC 5520
Teaching K-6 Algebraic Reasoning for Practitioners
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides practicing teachers a deeper understanding of algebraic expressions, equations, functions, real numbers, and instructional strategies to facilitate the instruction of this content for elementary students. Course fee of $15 per credit applies.

EDUC 5530
Teaching K-6 Geometry and Measurement for Practitioners
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides practicing teachers a deeper understanding of the geometry and measurement content that exists in the state core and instructional strategies to facilitate the instruction of this content. Special attention in this course will be given to applying content understanding in geometry and measurement to classroom practice, interpreting and assessing students’ work and learning, and to integrating NCTM process standards and the Utah Intended Learning Outcomes (ILOs) into instruction. Course fee of $15 per credit applies.

EDUC 5540
Teaching K-6 Data Analysis and Problem Solving for Practitioners
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Develops a firm problem-solving foundation. Using skills and strategies applied in mathematical contexts practicing teachers will learn to think, work with others, present solutions orally to the whole class, and write up detailed solutions. Provides practicing teachers a deeper understanding of probability and data representation and analysis. Special attention in this course will be given to applying content understandings to classroom practice, to interpreting and assessing students’ work and learning, and to integrating NCTM process standards and the Utah Intended Learning Outcomes (ILOs) into instruction. Course fee of $15 per credit applies.

EDUC 5550
Teaching K-6 Assessment and Intervention for Practitioners
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides practicing teachers a deeper understanding of the various types of assessment and their appropriate use for guiding instruction, intervention, and evaluation of student learning of mathematics content. Special attention will be given to the application of mathematical content understandings to planning for classroom instruction and assessment of student learning that is consistent with NCTM process standards and Utah instructional learning outcomes. Course fee of $15 per credit applies.

EDUC 5600
Education of the Gifted and Talented
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers of GT learners to better understand the field as an evolving and changing discipline influenced by philosophies, research-based principles and theories, relevant laws and policies, cultural and historical points of view, and human issues that influence professional practice, including assessment, instructional planning, delivery, and program evaluation. Explores characteristics of gifted individuals with emphasis on identifying needs and a general overview of possible services for gifted learners. Prepares teachers to advocate for GT students and their programs in schools and school districts. Course fee of $15 per credit applies.

EDUC 5610
Social and Emotional Needs of the Gifted
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Explores current research and material relevant to the social and emotional issues that may arise for gifted and talented students. Develops a deeper understanding of social and emotional issues that students with gifts and talents experience in K-12 classrooms. Prepares teachers of GT learners and their families to advocate for GT services. Requires 15 hours of field experience/practicum hours in addition to class time. Course fee of $15 per credit applies.

EDUC 5620
Identification/Evaluation in Gifted Education
3:3:0 On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers to use the results of a variety of assessment tools for both identification and learning progress decisions. Defines the processes of identification, legal policies, and ethical principles of measurement and assessment related to referral, eligibility, program planning, instruction, and placement. Requires 15 field experience/practicum hours in addition to class time. Course fee of $15 per credit applies.
EDUC 5630
Theory into Practice in Gifted and Talented Education
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers to understand societal influences on the development of curricula. Helps teachers to develop long- and short-range units of instruction anchored in both general and special curricula for gifted and talented students, taking into consideration each individual's abilities and needs, the learning environment, and cultural and linguistic factors. Course fee of $15 per credit applies.

EDUC 5635
Methods and Materials in Gifted Education for Practitioners
2:2:0  On Sufficient Demand
* Prerequisite(s): Utah Teaching License or permission from the Dean of the School of Education

Requires teacher-participants to locate, create, and or adapt curricular materials needed to implement differentiated instruction for gifted and talented learners. Helps teachers develop materials and methods of instruction that will encourage creative problem-solving and should be adaptable for a variety of student abilities and needs, the learning environment, and cultural and linguistic factors that may influence instruction. Course fee of $15 per credit applies.

EDUC 5640
Improvement of Curriculum Instruction in the Content Areas
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers of gifted and talented students with the selection, adaptation, creation, and implementation of differentiated instructional models and strategies, especially those related to fostering creativity. Requires 15 field experience/practicum hours in addition to class time.

EDUC 5650
Leadership in Gifted and Talented Education
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers to effectively use leadership principles to collaborate with students and their families, other educators, and related service providers to advocate for individuals with gifts and talents as they promote the learning and well-being of individuals with gifts and talents across settings and diverse learning experiences. Course fee of $15 per credit applies.

EDUC 5660
Reading Assessments and Instructional Interventions for Practitioners
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps practicing teachers become proficient in developing and using a variety of formal and informal assessments and instructional procedures to increase or accelerate students' reading achievement as appropriate. Prepares teachers to screen for reading problems, diagnose reading strengths and needs, and monitor progress to ensure students achieve optimal growth in reading within the context of a Multi-Tiered System of Supports. Develops procedures for gathering, analyzing, and interpreting data to inform instruction, and presents an overview of methods for communicating findings to stakeholders. Course fee of $15 per credit applies.

EDUC 5661
Foundations of Literacy
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps practicing teachers acquire foundational and declarative knowledge about literacy instruction, including historical perspectives on reading instruction, an introduction to theories and models of literacy acquisition, and discussions of research related to lifelong literacy and its instructional implications. Requires students to examine the history of the field of literacy, including the debates and various stances of reading researchers and the instructional directives developed as a result of the research. Course fee of $15 per credit applies.

EDUC 5662
Instruction with Literature and Informational Texts for Children and Young Adults
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides an overview of literary and informational texts for children and young adults, with emphasis on classic and recent publications, and their appropriate use in the classroom. Discusses important authors, historical context, and background, and considers current trends and classroom applications in literacy. Course fee of $15 per credit applies.

EDUC 5663
Content Area Reading and Writing Instruction for Practitioners
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps practicing teachers develop an in-depth understanding of the research findings, issues, principles, and practices related to exemplary, research-based literacy instruction in the content areas. Prepares teachers to provide every student with meaningful and engaging opportunities to learn high-level skills through reading, writing, and speaking while working with graphics and texts, including images, video, and audio in the K-12 curriculum. Teaches how to evaluate texts in various content areas or topics to identify the qualitative and quantitative features of a text and address reader and task considerations. Course fee of $15 per credit applies.

EDUC 5664
Instructional Implications of Literacy Development for Practitioners
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Focuses on emergent literacy development for students in grades K-12 and how that development is well-designed for appropriate literacy learning environments, experiences, and instructional interventions for emergent language learners. Covers the history, major perspectives, and theories about how students understand and develop literacy. Develops understandings of developmentally appropriate instruction, reading behaviors, and literacy development within the larger framework of the communicative arts, i.e., oracy, written expression, reading, spelling, handwriting, listening, the visual and performing arts, and the social community, i.e., family, socio-economic conditions, culture, ethnicity, language, etc. Course fee of $15 per credit applies.

EDUC 5665
Reading Comprehension Instruction for Practitioners
3:3:0  Fall, Spring, Summer
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps practicing teachers acquire knowledge and understanding of current theories and models that impact reading comprehension and apply that knowledge in instruction. Focuses on understanding reading comprehension, increasing the range, quality and complexity of reading materials used by students, and supporting student responses to text. Builds teachers’ ability to help their students use texts efficiently and effectively to develop and express complex, critical thinking. Course fee of $15 per credit applies.
EDUC 5666  
Effective Writing Instruction for Practitioners  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines theories, concepts, and methodologies that promote the development of strategic writers. Prepares teachers to provide research-based methods for teaching K-12 students to develop a range of writing skills and applications including how to compose opinion/argumentation, informational/expository, and narrative writing. Facilitates teachers' ability to assess K-12 student writing. Course fee of $15 per credit applies.

EDUC 5700  
Foundations of Dual Language Immersion Education  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Presents a historical overview and the theoretical and research foundations for dual language and immersion education. Emphasizes the practical application of theory and research in immersion programs. Course fee of $15 per credit applies.

EDUC 5710  
Instructional Strategies and Curriculum and Classroom Management for the Elementary Classroom  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Designed to acquaint secondary teachers seeking a K-12 Dual Language Immersion (DLI) endorsement with instructional strategies and classroom management for the elementary classroom. Focuses on helping students to understand the elementary curriculum and plan units of instruction, and to build a repertoire of teaching strategies, tasks, and resources for use in the elementary classroom. Requires 15 hours of field experience/practicum hours in a DLI classroom in addition to class time. Course fee of $15 per credit applies.

EDUC 5750  
Energy in STEM for Elementary Teachers  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Provides teachers with a deep and useful understanding of energy and the nature of how students use concepts of energy to make sense of phenomena across life, earth, and physical science. Enhances teacher insights into: 1) how matter and energy interact, 2) the relationships of energy to forces and interactions within fields, and 3) pedagogical content knowledge around teaching and learning about energy. Also connects knowledge of energy concepts to practices in technology, engineering, and mathematics. Course fee of $15 per credit applies.

EDUC 5760  
Force in STEM for Elementary Teachers  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Provides teachers with a deep and useful understanding of force and the nature of how students use concepts of force to make sense of phenomena across life, earth, and physical science. Enhances teacher insights into: 1) how force, matter and energy interact, 2) the relationship of force to energy and interactions within fields, and 3) pedagogical content knowledge around teaching and learning about force. Also connects knowledge of concepts of force to practices in technology, engineering and mathematics. Course fee of $15 per credit applies.

EDUC 5770  
Matter in STEM for Elementary Teachers  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Provides teachers with a deep and useful understanding of matter and the nature of how students use concepts of matter to make sense of phenomena across life, earth, and physical science. This understanding enhances teacher insights into: 1) how matter and energy interact, 2) the relationships of matter to forces and interactions within fields, and 3) pedagogical content knowledge around teaching and learning about matter. Also connects knowledge of concepts of matter to practices in technology, engineering and mathematics. Course fee of $15 per credit applies.

EDUC 5780  
Nature of Science and Engineering  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Examines the increasingly pervasive role of electronic media in educating and socializing young students, especially as it affects the K-12 classroom. Explores the range of content available to these students, their families, and their classrooms and reviews research on the role of media in shaping individual identity and affecting school performance; analyzes public policies that affect teachers and students. Course fee of $15 per credit applies.

EDUC 5790  
STEM Practices with a Focus on Technology and Problem-Based Learning  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Examines issues surrounding the use of technology in curricular and instructional design, especially in designing coursework for an online learning environment. Requires students to incorporate appropriate digital media formats to create an online learning environment. Addresses issues of school leadership, as participants may become mentors in the area of educational technology. Course fee of $15 per credit applies.
EDUC 5820
Designing and Producing Media for Instruction for Practitioners
3:3:0 Summer
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education
Helps students produce educational media materials for their particular classroom. Requires students to collaborate with others to design, produce, test, and revise a unique project tailored for their instructional practice. Requires students to use a variety of digital tools to conceptualize, design, fashion, and evaluate media projects. Course fee of $15 per credit applies.

EDUC 5830
Digital Models of Instruction for Practitioners
3:3:0 Summer
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education
Focuses on using instructional design and Web page design principles for specific classroom populations. Examines the best instructional use of online options, including flipped and hybrid course design, and gaming. Requires completion of an instructional design plan for an instructional unit of the participants' choice for a learner group of their choice. Course fee of $15 per credit applies.

EDUC 5840
Universal Design for Learning for Practitioners
3:3:0 Fall
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education
Focuses on universal design for learning (UDL) that differentiates curricula and learning environments for a wide range of student abilities and disabilities. Requires students to learn to apply the UDL approach in designing differentiated learning experiences for their classrooms using educational technology. Course fee of $15 per credit applies.

EDUC 5850
Digital Course Design Capstone for Practitioners
3:3:0 Spring
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education
Teaches students to design and create media for content-specific units of instruction. Requires students to use technology specific to a given discipline, and to incorporate instructional design and digital media to create an online unit of study. Course fee of $15 per credit applies.

EDUC 6010
AB ABA Concepts and Principles
3:3:0 Fall
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education
Provides students with a strong foundation in the basic concepts and principles of ABA, including the history and philosophical assumptions of behavior analysis and autism spectrum disorder. Graduate fee of $640 applies. Course fee of $15 per credit applies.

EDUC 6020
Ethics and Professional Competencies in Applied Behavioral Analysis
3:3:0 Fall
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education
Defines ethical responsibilities required in the field of applied behavior analysis. Introduces policy and practice related to informed consent, protection of confidentiality, selection of least intrusive and least restrictive behavior change procedures within the context of case methodology. Emphasizes legal issues and ethical decision making processes. Covers professional, disciplinary, and ethical standards for Board Certified Behavior Analyst certification in depth. Course fee of $640 applies. Course fee of $15 per credit applies.

EDUC 6030
Developing and Changing Behaviors
3:3:0 Spring
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education
Explains various behavioral assessments and intervention strategies. Focuses on single subject designs and procedures for measuring behavior, displaying data, and interpreting results. Examines ways to evaluate and analyze behavior change. Course fee of $640 applies.

EDUC 6040
Measurement in Single Subject Design
3:3:0 Spring
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education
Introduces methods for collection and interpretation of various types of data. Focuses on the importance of making data-driven decisions for behavior change procedures based on functional relationships. Course fee of $640 applies.

EDUC 6050
Functional Behavior Assessment and Treatment
3:3:0 Fall
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education
Focuses on using methods and tools for selecting and defining target behaviors and for behavior measurement. Provides experience in methods to develop new behavior using imitation, modeling, shaping, and chaining and methods to decrease behaviors using extinction, differential reinforcement and antecedent interventions. Reviews and extends the study of functional behavior assessment, verbal behavior, generalization and maintenance of behavior change. Course fee of $640 applies.

EDUC 6060
Advanced Topics in Applied Behavior Analysis
3:3:0 Fall
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education
Focuses on advanced topics in behavior analysis, including current research, changes in relevant legislation, emerging areas of behavior analysis, measurement technology, school applications, teaching methodology, innovative interventions, and ethics. Course fee of $640 applies.

EDUC 6070
Training Supervision and Performance Monitoring in Applied Behavior Analysis
3:3:0 Spring
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean
Examines the training, supervision, and performance monitoring from an applied Behavior Analytic perspective. Provides students with a strong foundation in effective training as it applies to parents, staff, and supervisees. Develops competency in supervision of ABA interns. Provides an overview of systems-level analysis, including organizational assessment, quality assurance, performance, and outcome monitoring.
EDUC 6080  
**Cognition, Education, and Technology**  
3:3:0  
*Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean*  

Examines the increasingly pervasive role of electronic media in educating and socializing young students. Explores the range of content available to these students and their families; documents the developing child’s patterns of use and understanding of media; examines theories and methods for assessing media effects; reviews research on the role of media in shaping individual identity and responses to social issues; and analyzes public policies that affect teachers and students.

EDUC 6081  
**Instruction, Curriculum and Educational Leadership in the Digital Age**  
3:3:0  
*Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean*  

Examines issues surrounding teachers and the use of technology in curricular and instructional design. Emphasizes designing coursework for an online learning environment. Explores the history and models of instructional design and teaches incorporation of appropriate digital media formats to create an online learning environment. Introduces the integrated nature of Technological Pedagogical Content Knowledge (TPACK) and the National Educational Technology Standards (NETS) as frameworks for identifying and applying the knowledge needed to teach and assess student learning with technology. Addresses issues of leadership, as students may become mentors in the area of educational technology.

EDUC 6082  
**Designing and Producing Media for Instruction**  
3:3:0  
*Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean*  

Designed to help students produce educational media materials. Offers students the opportunity to collaborate with others to design, produce, test, and revise a unique project for television, multimedia, the web, mobile applications, video games, radio, photography, or other formats. Teaches the use of a variety of tools and formats, including digital storytelling, video, online research tools, WebQuests, advanced Excel, Google tools, Web 2.0, and GPS. Requires the conceptualization, design, fashioning, and evaluation of media projects. Explores several analytic frameworks drawn from both instructional design and education research.

EDUC 6083  
**Digital Models of Instruction**  
3:3:0  
*Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean*  

Focuses on using instructional design and Web page design principles. Examines the best instructional use of online options, including flipped and hybrid course design, and gaming. Requires completion of an instructional design plan for an instructional unit of the participants’ choice for a learner group of their choice.

EDUC 6084  
**Universal Design for Learning**  
3:3:0  
*Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean*  

Focuses on universal design for learning (UDL) that creates curricula and learning environments that are designed to achieve success for a wide range of student abilities and disabilities. Covers the UDL approach, which takes advantage of advances in the fields of cognitive neuroscience of learning, educational technologies, and multimedia. Teaches how to apply the UDL approach in designing differentiated learning experiences using educational technology.

EDUC 6085  
**Digital Course Design Capstone**  
3:3:0  
*Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean*  

Teaches students to design and create media for content-specific units of instruction. Covers the use of technology specific to a given discipline, and teaches how to incorporate instructional design and digital media to create an online unit of study.

EDUC 6100  
**Research Methodology**  
3:3:0  
*Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean*  

Introduces the principal methodologies used in research in education. Presents basic information about the purposes of research, the scientific method, and basic qualitative and quantitative research. Identifies methods for locating, reading, interpreting and using research reports and in applying measurement issues and research methods to classroom problems. Investigates teacher research practices and ways it can be used to study teaching and teacher education.

EDUC 6110  
**Applied Statistics for Education**  
3:3:0  
*Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean*  

Introduces elementary statistics in educational settings and includes descriptive statistics, sampling, central tendency, and inferential methods. Emphasizes reading, understanding and evaluating statistics in research reports.

EDUC 6120  
**Personal Leadership and Organizational Design**  
3:3:0  
*Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration*  

Introduces students to critical concepts about leadership theories and practice. Provides both historical perspective and current understanding to approaches, methods, and practices of leaders. Provides insight into how leadership skills and organization strategies produce increased productivity and better learning/working environments for P-12 students’ academic success and well-being. Provides opportunity for class members to examine their own beliefs and develop a personal model of leadership. Emphasizes attributes that promote integrity, fairness, transparency and trust.

EDUC 6130  
**School Operations and Management-Finance/Law/Safety**  
3:3:0  
*Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration*  

Explores school finance, law, and safety as primary themes in school management and operations. Provides an overview of current K-12 management conditions and theory. Discusses these themes 1) best management theories and practices for not-for-profit organizations, 2) rules and regulations that govern school finance, 3) court rulings in areas of student speech, discipline, and other points of tensions in public schools, and 4) school organization to keep students physically and emotionally safe.
EDUC 6140
Instructional Leadership and Data-based Decision Making
3:3:0 Fall
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration
Advances student understanding, skill, and capacity to facilitate coherent systems of curriculum development, impactful instruction, valid assessment. Builds professional capacity for data interpretation and decision making for the success and well-being of students and faculty.

EDUC 6150
School Operations and Management-Communication/Planning/HR/Evaluation
3:3:0 Spring
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration
Explores school communication, planning, human resources, and evaluation as primary themes in school management and operations. Provides an overview of current K-12 management conditions and theory. Reviews the role of legislation, policy, and leadership on the primary themes. Prepares students to communicate with stakeholders, strategically plan for school improvement, know best practices in the hiring and retention of public school staff.

EDUC 6160
Leading Professional Learning Communities
3:3:0 Spring
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration
Introduces students to critical concepts about building a school culture that leverages the strengths of collective solutions. Provides background information on the development of professional learning communities (PLCs) and how they can impact high student performance. Scaffolds student knowledge on how to organize and implement PLCs. Identifies leadership skills required to effectively manage change within the school setting. Introduces assessments to use in identifying challenges and summarizing impact of PLC fairness, transparency and trust.

EDUC 6170
Leading Change/Innovation/Educational Entrepreneurship
3:3:0 Summer
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration
Introduces critical concepts of school change. Addresses strategies to encourage and manage innovation and entrepreneurship. Prepares students to successfully manage change and innovation in teaching and learning in the 21st century. Guides students in learning to anticipate needed changes and to develop skills to effectively lead innovation in their school settings.

EDUC 6200
Masters Project
3:3:0 Fall
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean
Provides working knowledge of action research methods in the public schools. Sets the standards for the professional M.Ed. action research-based project. Utilizes APA guidelines. Establishes techniques and strategies for successful project completion.

EDUC 6201
Teacher Performance Assessment Project
2:2:0 Spring
* Prerequisite(s): Admission to Secondary Teaching, Graduate Certificate Program
* Corequisite(s): EDUC 6203
Introduces the teaching and learning cycle: planning, instruction, and assessment. Assists students in completing an authentic assessment tool that shows how they develop and evaluate student learning. Documents authentic practices from the student's teaching experience that address planning, instruction, assessment, analyzing teaching, and academic language to reveal the impact of a candidate's teaching performance on student learning.

EDUC 6202
Classroom Management Practicum
3:2:3 Fall
* Prerequisite(s): Admission to Secondary Teaching, Graduate Certificate Program
Provides first-hand, supervised, clinical experience in observing and implementing effective class management practices.

EDUC 6203
Student Teaching Graduate Licensure
6:6:0 Spring
* Prerequisite(s): Admission to Secondary Teaching, Graduate Certificate Program
* Corequisite(s): EDUC 6201
Includes 400 hours of student teaching experience in a secondary classroom, grades 7-12. Includes application of knowledge, skills, and attitudes derived in previous course work and program experience. Is required for students to be recommended for a secondary education license from the Utah State Office of Education. May be Graded Credit/No Credit.

EDUC 6300
Curriculum Design
3:3:0 Summer
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean
Provides a foundation in curriculum theory and practice. Introduces instructional design theories principles and models. Outlines the historical development, current processes and practices of curriculum development, instructional design, implementation, and assessment. Investigates research and theory about educational contexts, motivation, curriculum, learning, and development as they relate to models of instruction. Examines applications and processes of curriculum decision making and the impact of national standards for content areas to curriculum design and development in classroom and district settings.

EDUC 6310
Assessing Educational Practices
3:3:0 Fall
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean
Examines theoretical and practical concepts that are foundational in educational evaluation and assessment. Explains learning assessments. Focuses on assessment instruments, assessment design, appropriate use of assessment techniques and the data derived from assessments to understand student progress and instructional design to promote student learning.

EDUC 6320
21st Century Teaching and Learning
3:3:0 Spring
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean
Focuses on instructional design and delivery incorporating 21st century learning design. Introduces a range of instructional models, most emphasizing cognition and the processing of information. Requires planning and implementing instruction using several selected models.
EDUC 6320  Diversity and Differentiation in the Classroom  
3:3:0  Spring  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean  
Provides an in-depth understanding of differentiated instructional design and delivery. Focuses on planning and implementing instruction for a diverse classroom community.

EDUC 6340  English as a Second Language Methods  
3:3:0  Summer  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor  
Prepares teachers to teach English as a second language in U.S. public schools. Includes both theoretical and applied aspects of second language learning and teaching. Provides general and special educators and second language specialists techniques, activities, strategies and resources to plan instruction for English language learners (ELLs). Emphasizes oral language development, literacy and content-area instruction for teaching K-12 students.

EDUC 6350  Theories of Second Language Acquisition  
3:3:0  Summer  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor  
Describes the variables that interact in the second language learning process, including linguistic, cognitive, social, cultural, and political factors. Examines learning a second language as both an individual and social experience. Examines the linguistic, cognitive, psychological, and emotional elements of learning a second language. Identifies the interactions between the individual and the contexts in which s/he interacts and then attempts to understand how they work together to foster or inhibit successful second language learning and acquisition.

EDUC 6360  Multicultural Education  
3:3:0  Spring  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor  
Identifies the connections between language, culture, and identity. Examines multicultural education through a focus on the historical, sociological, and philosophical foundations of education. Emphasizes the role of ethnicity in the development of the United States and its education system. Outlines multicultural / multilingual curricula with a special focus on culturally/linguistically-responsive instruction and assessment techniques.

EDUC 6370  Assessment of Second Language Learners  
3:3:0  Summer  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor  
Examines theory, methods, and practice in the testing of bilingual students at both the classroom level and the large-scale level in the context of school accountability. Focuses on assessment of language proficiency in English language learners (ELL) and the assessment of academic achievement of bilingual students in specific content areas. Develops and reviews tasks (test items), response formats, scoring systems, and test administration procedures as critical to attaining validity and fairness. Examines testing major current testing policies for linguistic minority students. Practicum required.

EDUC 6380  Literacy and Linguistics in English as a Second Language  
3:3:0  Fall  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor  
Focuses on how teachers can best meet the literacy and language needs of students from a variety of cultural, socioeconomic and language groups. Explores frameworks for providing high-quality literacy instruction to all students. Analyzes classrooms and schools that have been successful in accomplishing this. Examines ethnic identities and personal conceptions of diversity, and how these may impact instructional decisions. Analyzes students and families represented in their classrooms. Discusses ways to build bridges between home and school cultures.

EDUC 6390  Family and Community Involvement  
3:3:0  Spring  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor  
Provides strategies for facilitating community participation in the education of minorities. Examines the role of the teacher in the classroom and community with the intention of developing insight and understanding of how the teacher's role in these areas impacts the adjustment of adolescents during grades 7-12. Considers models and methods for facilitating positive relationships. Studies the techniques of family-school collaboration as well as constructive methods of evaluation. Practicum required.

EDUC 6400  Teachers as Leaders  
3:3:0  Spring  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean  
Introduces students to critical concepts about transformational leadership. Provides awareness of how leadership skills and task importance motivates people; focuses on the team or organization strategies that produce increased productivity and better work for colleagues and students. Focuses on issues and strategies for teacher leadership.

EDUC 6410  Contemporary Issues  
3:3:0  Summer  
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean  
Presents contemporary theories of learning and teaching from personal and public perspectives and how those theories converge with professional practice in classrooms and schools. Provides a study of the philosophical foundations of curriculum and instruction in American schools, the social and cultural conditions that influence education, and new concepts in education curriculum materials, and methods of instruction.

EDUC 6420  Diversity in Higher Education  
3:3:0  Fall  
* Prerequisite(s): Admission to graduate status, admission to Master of Education program, or permission of the Dean  
Examines multiple critical lenses informing the higher education landscape on issues related to marginalization, identity, silence, under-representation and other factors that American higher education has historically been inadequate at addressing. Guides students to develop a personal framework based in reflexivity around biases. Synthesizes collegial, institutional, historical and contextual nuances to provide foundational knowledge. Develops a dispositional and interdisciplinary approach to facilitate inclusion with particular higher education roles and activities.
EDUC 6430
Law-Policy-Ethics in Higher Education
3:3:0  Fall
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean
Examines legal frameworks, liability, compliance, constitutional and civil rights, competing rights of institutions, faculty, staff, and students, and contractual obligations in higher education. Explores the legal, ethical, institutional, and political processes that influence higher education and the relationship between law and the system of higher education. Critiques legal issues as a way to define the role and meaning of higher education in today's society.

EDUC 6440
Leadership in Higher Education
3:3:0  Spring
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean
Examines organizational theory, models, governance, and management processes in higher education, leadership perspectives and leadership theory. Explores leadership as a discipline that transcends functional area, serving as a framework to lead and guide within higher education. Investigates leadership theories and formulates personal approach as an educational leader.

EDUC 6450
Planning-Budget-Organizational Effectiveness
3:3:0  Fall
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean
Examines the principles and practices of strategic planning, evaluation, accountability, and financial management in higher education institutions, operating units, and academic programs.

EDUC 6460
Student Success and Development
3:3:0  Spring
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean
Presents various theories relevant to college student development and applies those theories to the field through class discussion, papers, and special projects. Introduces students to the major theories of learning, development, and retention and connects them with current practice.

EDUC 6470
Foundations and Contexts of Higher Education
3:3:0  Summer
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean
Examines diverse models and systems of higher education in an effort to provide contexts for effective work and leadership in higher education environments. Explores the nuances of higher education institutions in terms of political dynamics, shared governance, technology, innovation, organizational culture, and external/internal constituent expectations and perceptions. Discusses U.S. and international models of higher education and future possibilities.

EDUC 6500
Teaching K-6 Numbers and Operations
3:3:0  On Sufficient Demand
* Prerequisite(s): Admission to School of Education graduate program; professional educator license; or permission of the Dean of the School of Education
Designed for K-6 teachers. Covers the content of Number and Operations to develop a comprehensive understanding of our number system and relate its structure to computation, arithmetic, algebra, and problem solving. Includes number, number sense, computation, and estimation through a coordinated program of activities that develop number concepts and skills. Special attention in this course will be given to how children learn and connect the fundamental concepts of number systems, children's developmental trajectories in the mathematical content of number and operations, how children construct their understanding of various number systems and arithmetic, children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs).

EDUC 6510
Teaching K-6 Data Analysis and Problem Solving
3:3:0  On Sufficient Demand
* Prerequisite(s): Acceptance to graduate studies in the School of Education; professional educator license, or permission of the Dean of the School of Education.
Provides practicing teachers a deeper understanding of the geometry and measurement content that exists in the state core and instructional strategies to facilitate the instruction of this content. Special attention in this course will be given to how children learn and connect the fundamental concepts of geometry and measurement, children's developmental trajectories in this mathematical content, how children construct their understanding of various geometric concepts, children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs).

EDUC 6520
Teaching K-6 Algebraic Reasoning
3:3:0  On Sufficient Demand
* Prerequisite(s): admission to School of Education graduate programs; professional educator license; or permission of the Dean of the School of Education.
Provides practicing teachers a deeper understanding of algebraic expressions, equations, functions, real numbers, and instructional strategies to facilitate the instruction of this content for elementary students.

EDUC 6530
Teaching K-6 Geometry and Measurement
3:3:0  On Sufficient Demand
* Prerequisite(s): Acceptance to graduate studies in the School of Education; professional educator license, or permission of the Dean of the School of Education.
Provides practicing teachers a deeper understanding of the geometry and measurement content that exists in the state core and instructional strategies to facilitate the instruction of this content. Special attention in this course will be given to how children learn and connect the fundamental concepts of geometry and measurement, children's developmental trajectories in this mathematical content, how children construct their understanding of various geometric concepts, children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs).

EDUC 6540
Teaching K-6 Data Analysis and Problem Solving
3:3:0  On Sufficient Demand
* Prerequisite(s): Professional educator license; admission to graduate program in the School of Education; or permission of the Dean of the School of Education.
Develops a firm problem-solving foundation. Using skills and strategies applied in mathematical contexts practicing teachers will learn to think, work with others, present solutions orally to the whole class, and write up detailed solutions. Provides practicing teachers a deeper understanding of probability and data representation and analysis. Special attention in this course will be given to children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs).
EDUC 6550  
Teaching K-6 Assessment and Intervention  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Professional educator license; admission to graduate level in the School of Education; or permission of the Dean of the School of Education.

Provides practicing teachers a deeper understanding of the various types of assessment and their appropriate use for guiding instruction, intervention, and evaluation of student learning of mathematics content. Teaches how to screen students for mathematics problems or potential mathematics problems, diagnose students' mathematics strengths and needs, and monitor students' progress to ensure students will make optimal progress in mathematics. Teaches procedures for managing and analyzing assessment data.

EDUC 6660  
Reading Assessments and Instructional Interventions  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Focuses on curriculum-based measurement, the assessment/instructional cycle, and how to use assessment data to design and implement instructional interventions to increase students' reading achievement. Studies the four federal assessment categories: screening, progress monitoring, diagnosis, and outcomes, as well as assessment instruments within the various categories and the 3-tiered model. Focuses on building students' oral language and background knowledge, teaching alphabet knowledge and phonemic awareness, teaching students to use and recognize and use common phonetic spelling patterns, building vocabulary, increasing fluency, teaching students to apply comprehension strategies, and fostering students reading engagement. Describes reading assessments and interventions that are appropriate at the primary, intermediate, and secondary levels.

EDUC 6661  
Literacy and Cognition of Reading  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Provides foundational knowledge about literacy instruction, including an historical perspective on reading instruction, an introduction to theories and models of literacy acquisition, a study of language systems and language acquisition, and theories related to the literacy development of people across the lifespan and their instructional implications. Includes the debates and various stances of reading researchers, and the instructional directives that grew out of the research.

EDUC 6662  
Early Literacy Instruction  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Designed to help students understand the history, major perspectives and theories about how young children understand literacy. Focuses on developmentally appropriate instruction and the value of play relating to oral and print literacy in kindergarten and the primary grades. Examines literacy development within the larger framework of the communicative arts, i.e., oracy, written expression, reading, spelling, handwriting, listening, the visual and performing arts, and the social community, i.e., family, socioeconomic conditions, culture, ethnicity, language, etc.

EDUC 6663  
Content Area Reading  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Designed to help practicing teachers develop an in-depth understanding of the research findings, issues, principles and practices related to exemplary, research-based reading and writing instruction in the content areas. Covers the use of textbooks and nonfiction reading materials for young students who are beginning readers and writers. Focuses on how to assist all learners to read, understand and learn from nonfiction reading materials. Covers assisting students at all grade levels in their reading of materials and materials of writing of text related to science, social studies, history, math art, music, etc.

EDUC 6664  
Adolescent Literacy  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Provides practicing secondary teachers with concepts, models, and strategies to support adolescent literacy instruction. Familiarizes teachers with practical constructs for understanding adolescent literacy, its importance, how it can be fostered and employed for student learning, how the challenges of adolescent literacy differ from the challenges of early reading instruction, and how systematic interventions can help remediate chronic failure in literacy and learning. Teaches effective literacy improvement practices that can be realistically implemented in the context of secondary teachers' many demands.

EDUC 6665  
Reading Comprehension Instruction  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Focuses on reading comprehension instruction as the essence of reading. Emphasizes the theoretical foundations that support comprehension such as schema theory and the construction-integration theory. Includes the following five research-supported strategies: activating prior knowledge, questioning, analyzing text structure, creating mental or visual images and summarizing. Teaches how to offer explicit teacher-led comprehension strategy instruction that will lead to helping their students coordinate a set of comprehension strategies. Teaches how to help students construct meaning through rich discussions and interactions around a variety of text structures and genres. Prepares teachers to provide scaffolded support including demonstrations, pictures, diagrams, and collaboration with other students.

EDUC 6666  
Effective Writing Instruction  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Focuses on using effective strategies for teaching writing across the curriculum and for diverse populations. Teaches application of the writing process, writing workshop, and interactive writing procedures in the classroom. Covers the development of orthographic knowledge and how to assess student work using the Qualitative Spelling Inventory and the Six-Trait Writing Model.

EDUC 6750  
Energy in Elementary STEM Education  
3:3:0  On Sufficient Demand  
* Prerequisite(s): Admission to Graduate Status; Admission to the School of Education Masters Degree Program; Or permission of the Dean or the instructor

Prepares teachers to teach English as a second language in U.S. public schools. Includes both theoretical and applied aspects of second language learning and teaching. Provides general and special educators and second language specialists techniques, activities, strategies and resources to plan instruction for English language learners (ELLs). Emphasizes oral language development, literacy and content-area instruction for teaching K-12 students.
EDUC 6760
Force in Elementary STEM Education
3:3:0  On Sufficient Demand
Provides teachers with a deep and useful understanding of force and the nature of how students use concepts of force to make sense of phenomena across life, earth, and physical science. Explores the theory of and enhances teacher insights into: 1) how force, matter and energy interact, 2) the relationship of force to energy and interactions within fields, and 3) pedagogical content knowledge around teaching and learning about force. Also connects knowledge of concepts of force to practices in technology, engineering and mathematics, and engages participants in evaluating technology appropriate to elementary STEM instruction. Requires participants to make connections between current learning theories and methods of STEM instruction.

EDUC 6770
Matter in Elementary STEM Education
3:3:0  On Sufficient Demand
Models effective and engaging instructional practices for teaching about matter in the elementary classroom, and connects knowledge of concepts of matter to practices in technology, engineering and mathematics. Requires participants to design and implement STEM lessons that will help elementary students use content knowledge about matter to make sense of phenomena across life, earth, and physical science. Designed to help participants gain insights into: 1) how matter and energy interact, 2) the relationships of matter to forces and interactions within fields, and 3) pedagogical content knowledge for teaching about matter. Involves participants in active instructional strategies and pedagogical theories. Focuses on designing learning environments that support collaborative learning and engagement in STEM lessons.

EDUC 6780
Science and Engineering in Elementary STEM Education
3:3:0  On Sufficient Demand
Explores the nature of science using science and engineering principles, practices, and processes. Investigates applications of learning theory to Science, Technology, Engineering and Mathematics using problem-based learning experiences. Requires participants to develop teaching practices to assist them in integrating engineering practices across disciplines as they apply Utah Science Standards to elementary STEM instruction.

EDUC 6790
Technology and Problem-Based Learning in Elementary STEM Education
3:3:0  On Sufficient Demand
Engages participants in developing meaningful understandings of problem-based approaches to teaching, learning, and the integration of STEM practices across the curriculum using appropriate technology. Requires participants to demonstrate their skills through the development of problem-based, hands-on learning experiences for elementary students, based on findings from current research and theory of cognitive development. Critically evaluates technology for STEM education, based on current national guidelines.

EDUC 6910
Project I
1:0:3  Fall
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean and completion of EDUC 6200
Provides instruction regarding writing a formal classroom-based research project proposal to present to the School of Education Graduate Board. Obtain human subject clearance. Course will be graded credit/no credit.

EDUC 6920
Project II
1:0:3  Spring
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean and completion of EDUC 6910
Provides support regarding Implementation of the classroom-based applied research project. Course will be graded credit/no credit.

EDUC 693R
Project III
1:0:3  Spring
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean and completion of EDUC 6920
Provides support regarding completion of a classroom-based applied research project and acceptance of the classroom-based applied project by the School of Education graduate Board. Course will be graded credit/no credit. Repeatable with department approval.

EDUC 694R
Directed Individual Study
.5 to 3: .5 to 3:0  On Sufficient Demand
* Prerequisite(s): Admission to Graduate Status; Admission to the School of Education Masters Degree Program or permission of the Dean
Provides individual instruction for Master of Education students wishing to further their understanding of the field of education. Focuses on individual research regarding instructional methods and/or assessment. May be repeated for a maximum of 6 credits. Graded Credit/No Credit.